



STIC Search Report

EIC 1700

STIC Database Tracking Number: 178115

TO: Anthony Green

Location: REM 9C15

Art Unit : 1755

January 31, 2006

Case Serial Number: 10/522193

From: Usha Shrestha

Location: EIC 1700

REMSSEN 4B28

Phone: 571/272-3519

usha.shrestha@uspto.gov

Search Notes



STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader
571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form

- I am an examiner in Workgroup: Example: 1713
- Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

- Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Banks, Kendra

178115

From: Green, Anthony (AU1755)
Sent: Tuesday, January 31, 2006 10:47 AM
To: STIC-EIC1700
Subject: Structure search 10/522,193

Please search for the structures of claims 1, 4 and 5. Thanks

Anthony Green
Primary Patent Examiner
AU 1755
REMSEN 9C15
571-272-1367

SCIENTIFIC REFERENCE BR
Sci & Tech Inf. Cntr

JAN 31 REC'D

Pat. & T.M. Office

=> fil reg

FILE 'REGISTRY' ENTERED AT 14:52:43 ON 31 JAN 2006

=> d his ful

FILE 'HCAPLUS' ENTERED AT 11:33:57 ON 31 JAN 2006

L1 1 SEA ABB=ON PLU=ON US20050235874/PN

FILE 'REGISTRY' ENTERED AT 11:34:33 ON 31 JAN 2006

L2 5 SEA ABB=ON PLU=ON (1047-16-1/BI OR 147-14-8/BI OR
20262-55-9/BI OR 475-71-8/BI OR 809279-79-6/BI)

L3 1 SEA ABB=ON PLU=ON PHTHALOCYANINE/CN

L4 1 SEA ABB=ON PLU=ON ANTHRAQUINONE/CN

L5 1 SEA ABB=ON PLU=ON PERYLENE/CN

E PERINONE/CN

L6 2 SEA ABB=ON PLU=ON ("PERINONE ORANGE"/CN OR "PERINONE
RED"/CN)

E DIOXAZINE/CN

L7 3 SEA ABB=ON PLU=ON ("DIOXAZINE PURPLE"/CN OR "DIOXAZIN
E VIOLET"/CN OR "DIOXAZINE VIOLET B"/CN OR "DIOXAZINE
VIOLET N"/CN)

E QUINOPHTHALONE/CN

L8 4 SEA ABB=ON PLU=ON (QUINOPHTHALONE/CN OR "QUINOPHTHALO
NE YELLOW"/CN)

E DIKETOPYRROLOPYRROLE/CN

L9 1 SEA ABB=ON PLU=ON DIKETOPYRROLOPYRROLE/CN

L10 2 SEA ABB=ON PLU=ON INDIGO/CN

L11 1 SEA ABB=ON PLU=ON THIOINDIGO/CN

L12 3 SEA ABB=ON PLU=ON QUINOPHTHALONE/CN

L13 1 SEA ABB=ON PLU=ON ISOINDOLINONE/CN

L14 1 SEA ABB=ON PLU=ON AZOMETHINE/CN

L15 18 SEA ABB=ON PLU=ON (L3 OR L4 OR L5 OR L6 OR L7 OR L8
OR L9 OR L10 OR L11 OR L12 OR L13 OR L14)

D L2 STR RSD

L16 183008 SEA ABB=ON PLU=ON 46.492/RID

FILE 'HCAPLUS' ENTERED AT 12:44:39 ON 31 JAN 2006

L17 29006 SEA ABB=ON PLU=ON L15

L18 130360 SEA ABB=ON PLU=ON L16

L19 702 SEA ABB=ON PLU=ON L17 AND L18

FILE 'REGISTRY' ENTERED AT 12:46:53 ON 31 JAN 2006

L20 1 SEA ABB=ON PLU=ON 147-14-8/RN

L21 1 SEA ABB=ON PLU=ON 475-71-8/RN

L22 1 SEA ABB=ON PLU=ON 1047-16-1/RN

L23 1 SEA ABB=ON PLU=ON 20262-55-9/RN

L24 1 SEA ABB=ON PLU=ON 809279-79-6/RN

FILE 'HCAPLUS' ENTERED AT 12:51:32 ON 31 JAN 2006

L25 2130 SEA ABB=ON PLU=ON L21 OR L22

L26 48 SEA ABB=ON PLU=ON L23

L27 1 SEA ABB=ON PLU=ON L24

L28 2177 SEA ABB=ON PLU=ON L25 OR L26

L29 176 SEA ABB=ON PLU=ON L28 AND L18

L30 0 SEA ABB=ON PLU=ON L17 AND L27

L31 1 SEA ABB=ON PLU=ON L27 AND L28

L32 176 SEA ABB=ON PLU=ON L29 OR L30 OR L31

L33 800 SEA ABB=ON PLU=ON L32 OR L19

L34 235 SEA ABB=ON PLU=ON L33 AND PREP/RL

L35 135 SEA ABB=ON PLU=ON L34 AND RACT/RL

L36 51 SEA ABB=ON PLU=ON L35 AND COAT?/SC,SX
 L37 1 SEA ABB=ON PLU=ON L36 AND L1
 L38 13832 SEA ABB=ON PLU=ON L20
 L39 899 SEA ABB=ON PLU=ON L38 AND L18
 L40 161 SEA ABB=ON PLU=ON L39 AND RACT/RL
 L41 2 SEA ABB=ON PLU=ON L40 AND (HYDROPHOBIC? AND HYDROPHIL
 IC?)
 L42 6 SEA ABB=ON PLU=ON L39 AND (HYDROPHOBIC? AND HYDROPHIL
 IC?)
 L43 6 SEA ABB=ON PLU=ON L41 OR L42
 L44 74 SEA ABB=ON PLU=ON L40 AND COAT?/SC,SX
 L45 1 SEA ABB=ON PLU=ON L44 AND LINK?
 L46 4 SEA ABB=ON PLU=ON L44 AND (HYDROPHOBIC? OR HYDROPHILI
 C?)
 L47 33 SEA ABB=ON PLU=ON L39 AND (HYDROPHOBIC? OR HYDROPHILI
 C?)
 L48 22 SEA ABB=ON PLU=ON L47 AND COAT?/SC,SX
 L49 24 SEA ABB=ON PLU=ON L43 OR L45 OR L46 OR L48
 L50 40395 SEA ABB=ON PLU=ON L18 AND (?DIOXY? OR ?AMINOALKYL?
 OR ?AMINO(A)OXY? OR ?AMINO?)
 L51 396 SEA ABB=ON PLU=ON (L17 OR L28) AND L50
 L52 106 SEA ABB=ON PLU=ON L51 AND RACT/RL
 L53 45 SEA ABB=ON PLU=ON L52 AND COAT?/SC,SX
 L54 QUE ABB=ON PLU=ON (HYDORPHOBIC? OR HYDROPHILIC?) (2A) (
 COLOR? OR COLOUR? OR PIGMENT? OR DYE? OR STAIN? OR
 PAINT? OR CHROMA# OR CHROMOGEN? OR CHROMOPHOR? OR
 TINCT? OR TINT?)
 L55 0 SEA ABB=ON PLU=ON L53 AND L54
 L56 1 SEA ABB=ON PLU=ON L36 AND L54
 L57 1 SEA ABB=ON PLU=ON L36 AND (HYDROPHOBIC? OR HYDROPHILI
 C?)
 L58 55 SEA ABB=ON PLU=ON L36 OR L53
 L59 77 SEA ABB=ON PLU=ON L58 OR L49 OR L55 OR L56 OR L57
 L60 13 SEA ABB=ON PLU=ON L59 AND (WATER OR H2O OR AQUEOUS) (2
 A) (COLOR? OR COLOUR? OR PIGMENT?)
 L61 40 SEA ABB=ON PLU=ON L59 AND (INK? OR JET(A)PRINT? OR
 JET(A)INK? OR PRINT?)
 L62 44 SEA ABB=ON PLU=ON L60 OR L61

=> d que 162

L3 1 SEA FILE=REGISTRY ABB=ON PLU=ON PHTHALOCYANINE/CN
 L4 1 SEA FILE=REGISTRY ABB=ON PLU=ON ANTHRAQUINONE/CN
 L5 1 SEA FILE=REGISTRY ABB=ON PLU=ON PERYLENE/CN
 L6 2 SEA FILE=REGISTRY ABB=ON PLU=ON ("PERINONE ORANGE"/CN
 OR "PERINONE RED"/CN)
 L7 3 SEA FILE=REGISTRY ABB=ON PLU=ON ("DIOXAZINE PURPLE"/C
 N OR "DIOXAZINE VIOLET"/CN OR "DIOXAZINE VIOLET B"/CN
 OR "DIOXAZINE VIOLET N"/CN)
 L8 4 SEA FILE=REGISTRY ABB=ON PLU=ON (QUINOPHTHALONE/CN
 OR "QUINOPHTHALONE YELLOW"/CN)
 L9 1 SEA FILE=REGISTRY ABB=ON PLU=ON DIKETOPYRROLOPYRROLE/
 CN
 L10 2 SEA FILE=REGISTRY ABB=ON PLU=ON INDIGO/CN
 L11 1 SEA FILE=REGISTRY ABB=ON PLU=ON THIOINDIGO/CN
 L12 3 SEA FILE=REGISTRY ABB=ON PLU=ON QUINOPHTHALONE/CN
 L13 1 SEA FILE=REGISTRY ABB=ON PLU=ON ISOINDOLINONE/CN
 L14 1 SEA FILE=REGISTRY ABB=ON PLU=ON AZOMETHINE/CN
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L6 OR L7 OR L8 OR L9 OR L10 OR L11 OR L12 OR L13 OR L14)

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L17 29006 SEA FILE=HCAPLUS ABB=ON PLU=ON L15

L18 130360 SEA FILE=HCAPLUS ABB=ON PLU=ON L16

L19 702 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 AND L18

L20 1 SEA FILE=REGISTRY ABB=ON PLU=ON 147-14-8/RN

L21 1 SEA FILE=REGISTRY ABB=ON PLU=ON 475-71-8/RN

L22 1 SEA FILE=REGISTRY ABB=ON PLU=ON 1047-16-1/RN

L23 1 SEA FILE=REGISTRY ABB=ON PLU=ON 20262-55-9/RN

L24 1 SEA FILE=REGISTRY ABB=ON PLU=ON 809279-79-6/RN

L25 2130 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 OR L22

L26 48 SEA FILE=HCAPLUS ABB=ON PLU=ON L23

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L31 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L27 AND L28

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L38 13832 SEA FILE=HCAPLUS ABB=ON PLU=ON L20

L39 899 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L18

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L41 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L40 AND (HYDROPHOBIC? AND HYDROPHILIC?)

L42 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 AND (HYDROPHOBIC? AND HYDROPHILIC?)

L43 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L41 OR L42

L44 74 SEA FILE=HCAPLUS ABB=ON PLU=ON L40 AND COAT?/SC,SX

L45 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L44 AND LINK?

L46 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L44 AND (HYDROPHOBIC? OR HYDROPHILIC?)

L47 33 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 AND (HYDROPHOBIC? OR HYDROPHILIC?)

L48 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L47 AND COAT?/SC,SX

L49 24 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 OR L45 OR L46 OR L48

L50 40395 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (?DIOXY? OR ?AMINOALKYL? OR ?AMINO(A)OXY? OR ?AMINO?)

L51 396 SEA FILE=HCAPLUS ABB=ON PLU=ON (L17 OR L28) AND L50

L52 106 SEA FILE=HCAPLUS ABB=ON PLU=ON L51 AND RACT/RL

L53 45 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND COAT?/SC,SX

L54 QUE ABB=ON PLU=ON (HYDROPHOBIC? OR HYDROPHILIC?) (2A) (COLOR? OR COLOUR? OR PIGMENT? OR DYE? OR STAIN? OR PAINT? OR CHROMA# OR CHROMOGEN? OR CHROMOPHOR? OR TINCT? OR TINT?)

L55 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L53 AND L54

L56 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND L54

L57 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND (HYDROPHOBIC? OR HYDROPHILIC?)

L58 55 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 OR L53

L59 77 SEA FILE=HCAPLUS ABB=ON PLU=ON L58 OR L49 OR L55 OR L56 OR L57

L60 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L59 AND (WATER OR H2O OR AQUEOUS) (2A) (COLOR? OR COLOUR? OR PIGMENT?)

L61 40 SEA FILE=HCAPLUS ABB=ON PLU=ON L59 AND (INK? OR JET(A)PRINT? OR JET(A)INK? OR PRINT?)

L62 44 SEA FILE=HCAPLUS ABB=ON PLU=ON L60 OR L61

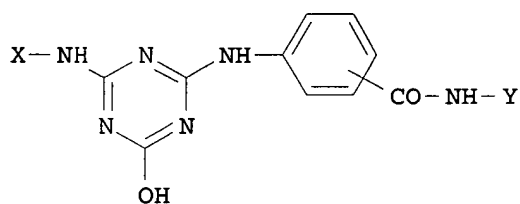
=> fil hcap
FILE 'HCAPLUS' ENTERED AT 14:52:59 ON 31 JAN 2006

=> d l62 1-44 ibib abs hitstr hitind

L62 ANSWER 1 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:731744 HCAPLUS
DOCUMENT NUMBER: 143:195306
TITLE: Pigment compositions showing low viscosity,
and good storage stability and transparency
INVENTOR(S): Minashima, Hidenori; Omura, Toru; Hamada,
Naoki
PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
JP 2005213409	A2	20050811	JP 2004-22697	2004 0130
PRIORITY APPLN. INFO.:			JP 2004-22697	2004 0130

GI



AB The compns., useful for coatings, inks, etc., contain C.I. Pigment Yellow 138 (I) and triazine ring-containing dispersants II [X = (substituted) naphthyl, (substituted) quinolinyl; Y = (CH₂)_iNR₁R₂; R₁, R₂ = alkyl, alkenyl; R₁R₂ may form N-, O-, or S-containing 5- or 6-membered ring; i = 1-6]. Thus, a dispersion containing I, methacrylic acid-Me methacrylate-Bu methacrylate-hydroxyethyl methacrylate copolymer, II [X = 8-quinaldyl, CONHY on p-position; Y = (CH₂)₃NEt₂; manufactured from 8-**aminoquinaldine**, cyanuric chloride, and 4-[3-(N,N-diethylaminopropyl)aminocarbonyl]aniline], and propylene glycol monomethyl ether acetate showed little viscosity increase after storage at 40° for 2 wk. The dispersion was applied on a PET film and

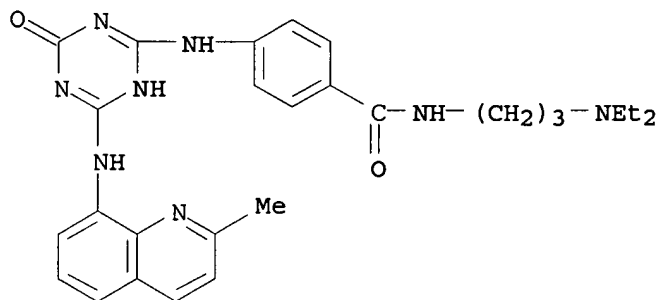
dried to give a 12- μ m thick layer showing 60° gloss 138.

IT 861655-75-6P 861655-76-7P 861655-77-8P

(pigment compns. containing triazine ring-containing dispersants, and showing low viscosity, and good storage stability and transparency)

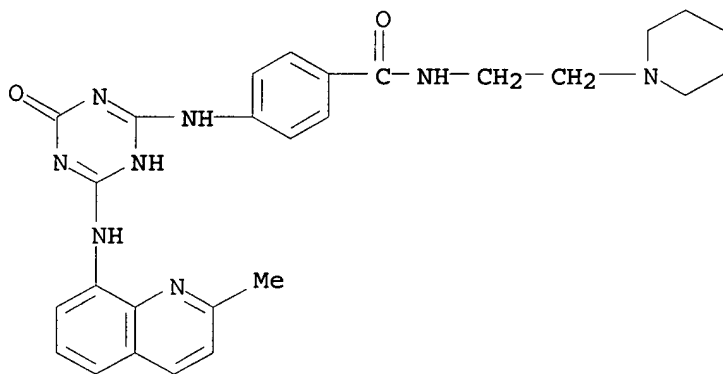
RN 861655-75-6 HCAPLUS

CN Benzamide, N-[3-(diethylamino)propyl]-4-[[1,4-dihydro-6-[(2-methyl-8-quinolinyl)amino]-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



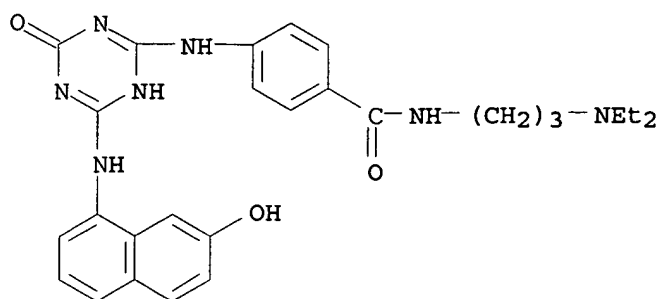
RN 861655-76-7 HCAPLUS

CN Benzamide, 4-[[1,4-dihydro-6-[(2-methyl-8-quinolinyl)amino]-4-oxo-1,3,5-triazin-2-yl]amino]-N-[2-(1-piperidiny)ethyl]- (9CI) (CA INDEX NAME)



RN 861655-77-8 HCAPLUS

CN Benzamide, N-[3-(diethylamino)propyl]-4-[[1,4-dihydro-6-[(7-hydroxy-1-naphthalenyl)amino]-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

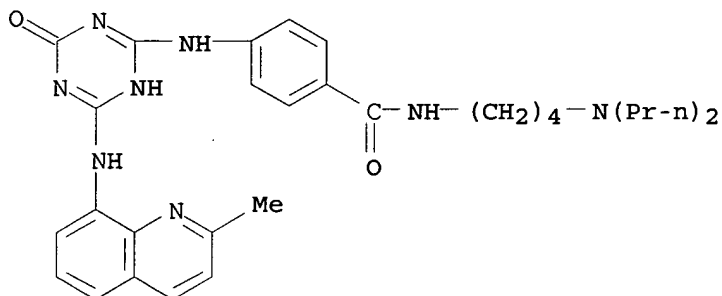


IT 861655-78-9 861655-79-0 861655-80-3

(pigment compns. containing triazine ring-containing dispersants, and showing low viscosity, and good storage stability and transparency)

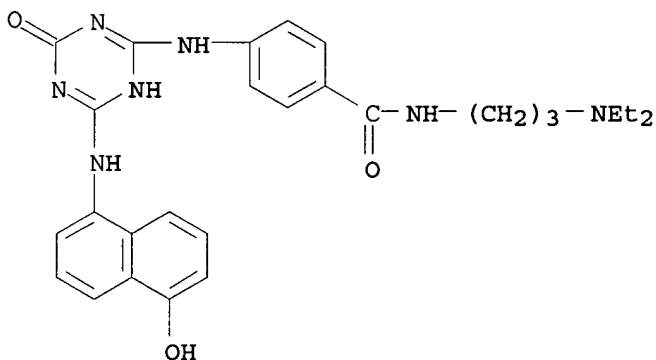
RN 861655-78-9 HCAPLUS

CN Benzamide, 4-[[1,4-dihydro-6-[(2-methyl-8-quinolinyl)amino]-4-oxo-1,3,5-triazin-2-yl]amino]-N-[4-(dipropylamino)butyl]- (9CI) (CA INDEX NAME)



RN 861655-79-0 HCAPLUS

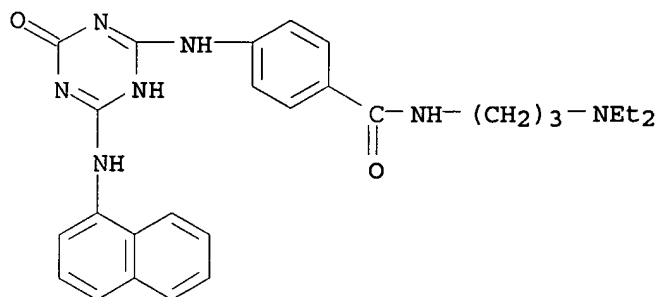
CN Benzamide, N-[3-(diethylamino)propyl]-4-[[1,4-dihydro-6-[(5-hydroxy-1-naphthalenyl)amino]-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



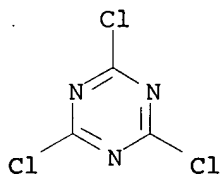
RN 861655-80-3 HCAPLUS

CN Benzamide, N-[3-(diethylamino)propyl]-4-[[1,4-dihydro-6-(1-

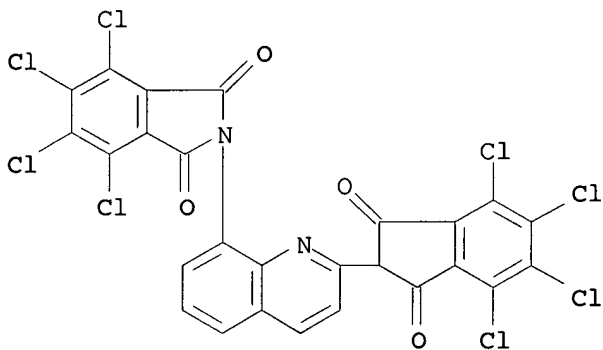
naphthalenylamino)-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



IT 108-77-0, Cyanuric chloride
(pigment compns. containing triazine ring-containing dispersants, and showing low viscosity, and good storage stability and transparency)
RN 108-77-0 HCAPLUS
CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)



IT 30125-47-4, Lionogen Yellow 1010
(pigment compns. containing triazine ring-containing dispersants, and showing low viscosity, and good storage stability and transparency)
RN 30125-47-4 HCAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 4,5,6,7-tetrachloro-2-[2-(4,5,6,7-tetrachloro-2,3-dihydro-1,3-dioxo-1H-inden-2-yl)-8-quinoliny]- (9CI) (CA INDEX NAME)



IC ICM C09B067-20
ICS C09B067-46
CC 42-6 (Coatings, Inks, and Related Products)

Section cross-reference(s): 25, 27, 28

ST **aminoquinaldine** pigment dispersion
quinaldylamino triazine dispersant; transparency
aminoquinaldine pigment dispersion; storage stability
aminoquinaldine pigment dispersion

IT **861655-75-6P 861655-76-7P 861655-77-8P**
 (pigment compns. containing triazine ring-containing dispersants, and showing low viscosity, and good storage stability and transparency)

IT **861655-78-9 861655-79-0 861655-80-3**
 (pigment compns. containing triazine ring-containing dispersants, and showing low viscosity, and good storage stability and transparency)

IT **108-77-0, Cyanuric chloride 118-46-7, 8-Amino-2-naphthol 18978-78-4, 8-Aminoquinaldine 27578-60-5, N-Aminoethylpiperidine 106595-73-7**
 (pigment compns. containing triazine ring-containing dispersants, and showing low viscosity, and good storage stability and transparency)

IT **30125-47-4, Lionogen Yellow 1010**
 (pigment compns. containing triazine ring-containing dispersants, and showing low viscosity, and good storage stability and transparency)

L62 ANSWER 2 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:160048 HCAPLUS

DOCUMENT NUMBER: 142:263276

TITLE: Pigment compositions for **printing**
 with good reproducibility and stability of their images

INVENTOR(S): Onda, Setsuo; Ikenari, Nobuyuki; Kitamura, Kunji; Matsushita, Motoaki; Tamatome, Hidehiro

PATENT ASSIGNEE(S): Sanyo Color Works, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2005048114	A2	20050224	JP 2003-283377	2003 0731
PRIORITY APPLN. INFO.:				2003 0731
				2003 0731

AB The compns., useful for color toners, **jet-printing inks**, etc., contain pigments and pigment derivs. Pg[XQ(NHYSO3H)[Z(CH2)mNR1R2]]n (Pg = pigment residue; X = CH2NH, NH, CONR3MNR4, etc.; R3, R4 = H, alkyl; M = C1-20 alkylene, alkenylene, arylene; Q = triazinetriyl; Y = ethylene, phenylene, naphthylene; R1, R2 = alkyl, may form heteroring together; Z = NH, O; m = 1-6; n = 0.1-2) or Pg[XQA(NHBCO2H)]n (A = OH, Z(CH2)mNR1R2; Pg, X, Q, Z, R1, R2, m, n = same as above; B = phenylene). Thus, a **jet ink** containing Pg1[CH2NHQOH(NH-p-C6H4CO2H)]0.9 (Pg1 =

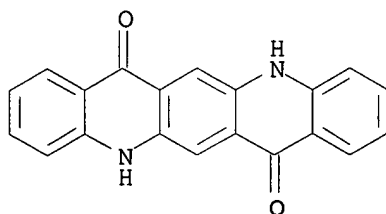
dimethylquinacridone residue, Q = same as above) and C.I. Pigment Red 122 (Magenta RT 150DL) showed viscosity 13.1 and 13.0 mPa-s before and after storing at 40° for 7 days, resp., and optical d. of **printed** images 1.39.

IT 1047-16-1, C.I. Pigment Violet 19

(Magenta RT 238D, Hostaperm Red Violet ER 02; pigment compns. for **printing** with good reproducibility and stability of their images)

RN 1047-16-1 HCAPLUS

CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
(CA INDEX NAME)



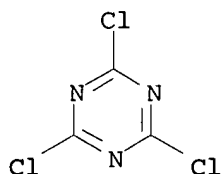
IT 108-77-0DP, Cyanuric chloride, reaction products with **amino**-containing pigments, amine-containing acids, and alkyldiamines 1047-16-1DP, Quinacridone, **amino** derivs., reaction products with cyanuric chloride, amine-containing acids, and alkyldiamines 845639-14-7P

845639-15-8P 845639-16-9P 845639-17-0P

(pigment compns. for **printing** with good reproducibility and stability of their images)

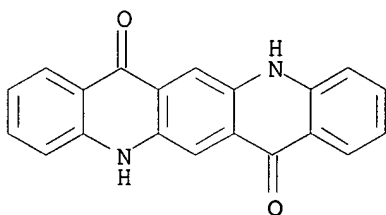
RN 108-77-0 HCAPLUS

CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)



RN 1047-16-1 HCAPLUS

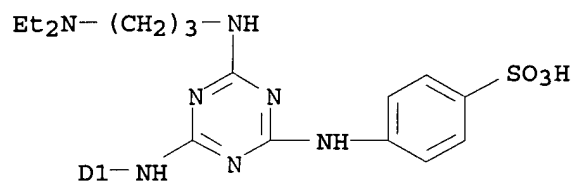
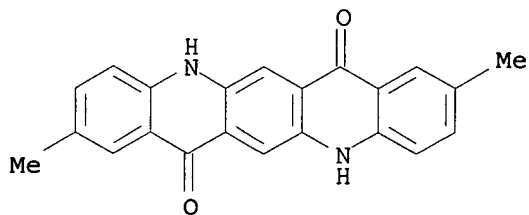
CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
(CA INDEX NAME)



RN 845639-14-7 HCAPLUS

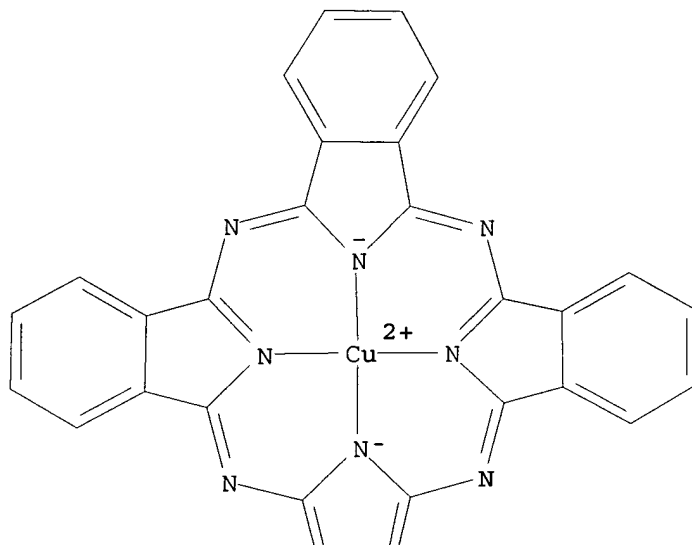
CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro-2,9-dimethyl-,

mono[[4-[[3-(diethylamino)propyl]amino]-6-[(4-sulfophenyl)amino]-1,3,5-triazin-2-yl]amino] deriv. (9CI) (CA INDEX NAME)

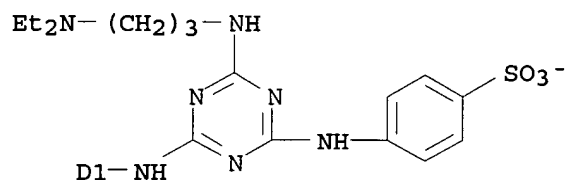
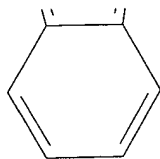


RN 845639-15-8 HCAPLUS
 CN Cuprate(1-), [4-[[4-[[3-(diethylamino-κN)propyl]amino]-6-[(29H,31H-phthalocyanin-C-yl-κN29,κN30,κN31,.kap pa.N32)amino]-1,3,5-triazin-2-yl]amino]benzenesulfonato(3-)]-(9CI) (CA INDEX NAME)

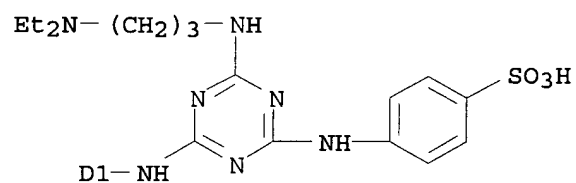
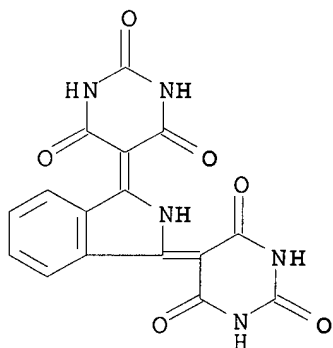
PAGE 1-A



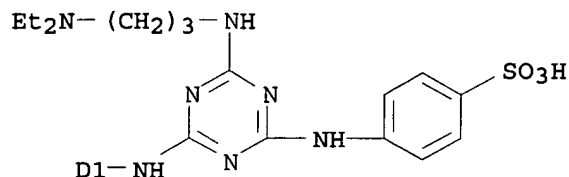
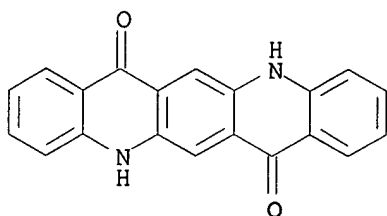
PAGE 2-A



RN 845639-16-9 HCAPLUS
 CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5,5'-(1H-isoindole-1,3(2H)-diylidene)bis-, mono[[4-[[3-(diethylamino)propyl]amino]-6-[(4-sulfophenyl)amino]-1,3,5-triazin-2-yl]amino] deriv. (9CI) (CA INDEX NAME)



RN 845639-17-0 HCAPLUS
 CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro-, mono[[4-[[3-(diethylamino)propyl]amino]-6-[(4-sulfophenyl)amino]-1,3,5-triazin-2-yl]amino] deriv. (9CI) (CA INDEX NAME)



- IC ICM C09D011-00
ICS B41M005-00; C09D017-00; G03G009-09; C09B048-00
- CC 42-12 (**Coatings, Inks, and Related Products**)
Section cross-reference(s): 74
- ST pigment compn **jet ink** image stability;
sulfonyltriazine carboxytriazine pigment deriv reproducibility
electrophotog toner
- IT **Inks**
(**jet-printing**; pigment compns. for
printing with good reproducibility and stability of
their images)
- IT Electrophotographic toners
Pigments, nonbiological
(pigment compns. for **printing** with good
reproducibility and stability of their images)
- IT 980-26-7, C.I. Pigment Red 122
(Magenta RT 150DL, Toner Magenta E 02; pigment compns. for
printing with good reproducibility and stability of
their images)
- IT 1047-16-1, C.I. Pigment Violet 19
(Magenta RT 238D, Hostaperm Red Violet ER 02; pigment compns.
for **printing** with good reproducibility and stability
of their images)
- IT 147-14-8, C.I. Pigment Blue 15:3
(Sanyo Cyanine Blue GP, Cyanine Blue KRO; pigment compns. for
printing with good reproducibility and stability of
their images)
- IT 85-41-6DP, Phthalimide, reaction products with pigments,
formaldehyde, amine-containing acids, cyanuric chloride, and
alkyldiamines 107-15-3DP, Ethylenediamine, reaction products
with pigments, chlorosulfonic acid, amine-containing acids, and
alkyldiamines 107-35-7DP, Taurine, reaction products with
amino-containing pigments, cyanuric chloride, and
alkyldiamines 108-77-0DP, Cyanuric chloride, reaction
products with **amino**-containing pigments, amine-containing acids,
and alkyldiamines 109-55-7DP, reaction products triazine- and
acid-containing pigments 118-92-3DP, 2-**Aminobenzoic** acid,
reaction products with **amino**-containing pigments, cyanuric
chloride, and alkyldiamines 147-14-8DP, Copper phthalocyanine,
amino derivs., reaction products with cyanuric chloride,
amine-containing acids, and alkyldiamines 150-13-0DP, 4-

Aminobenzoic acid, reaction products with **amino**-containing pigments, cyanuric chloride, and alkyldiamines **1047-16-1DP**, Quinacridone, **amino** derivs., reaction products with cyanuric chloride, amine-containing acids, and alkyldiamines **4216-01-7DP**, Paliogen Yellow L 1560, **amino** derivs., reaction products with cyanuric chloride, amine-containing acids, and alkyldiamines **7790-94-5DP**, Chlorosulfonic acid, reaction products with pigments, ethylene diamine, amine-containing acids, and alkyldiamines **13598-45-3DP**, **Hydroxyaminosulfonic acid**, reaction products with pigments, amine-containing acids, cyanuric chloride, and alkyldiamines **30525-89-4DP**, Paraformaldehyde, reaction products with pigments, phthalimide, amine-containing acids, cyanuric chloride, and alkyldiamines **36888-99-0DP**, Paliotol Yellow L 1820, **amino** derivs., reaction products with cyanuric chloride, amine-containing acids, and alkyldiamines **61699-88-5DP**, **Dibutylaminopropylamine**, reaction products triazine- and acid-containing pigments **845639-14-7P 845639-15-8P 845639-16-9P 845639-17-0P**

(pigment compns. for **printing** with good reproducibility and stability of their images)

IT 104-78-9 121-57-3, Sulfanilic acid

(pigment compns. for **printing** with good reproducibility and stability of their images)

IT 4216-01-7, Paliogen Yellow L 1560 36888-99-0, Paliotol Yellow L 1820

(pigment compns. for **printing** with good reproducibility and stability of their images)

L62 ANSWER 3 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:54394 HCAPLUS

DOCUMENT NUMBER: 142:116106

TITLE: Method for manufacture of organic dye derivative- or triazine derivative-adsorbed organic pigments showing good dispersibility, and manufactured pigments

INVENTOR(S): Itabashi, Masashi; Nishigaki, Hitoshi

PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005015674	A2	20050120	JP 2003-184065	2003

0627

PRIORITY APPLN. INFO.: JP 2003-184065

2003
0627

AB The method includes treating acidic functional group-containing organic dye derivs. (I) or acidic functional group-containing triazine derivs. (II) with organic pigments in water to achieve adsorption area (definition given) $\geq 50\%$ BET sp. surface area of the pigments, and amount of nonadsorbed I or II

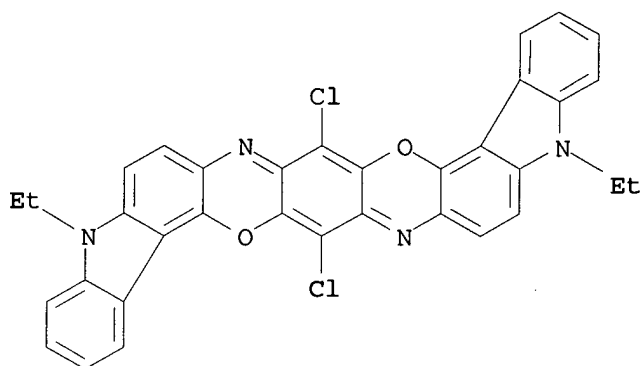
≤0.005 g/1 g-pigment. Thus, Lionol Blue E was treated with Cu phthalocyaninesulfonic acid in water, and mixed with water-soluble acrylic polymer and Cymel 325 (melamine resin) to give a coating showing good storage stability and water resistance.

IT 215247-95-3, Hostaperm Violet BL

(adsorption of acidic functional group-containing organic dye or triazine dispersants on organic pigments for coatings showing good storage stability and water resistance)

RN 215247-95-3 HCAPLUS

CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-dihydro- (9CI) (CA INDEX NAME)



IT 9003-08-1, Melamine resin

(crosslinking agent, Cymel 325, Cymel 303; adsorption of acidic functional group-containing organic dye or triazine dispersants on organic pigments for coatings showing good storage stability and water resistance)

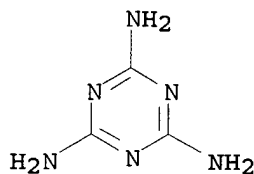
RN 9003-08-1 HCAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI) (CA INDEX NAME)

CM 1

CRN 108-78-1

CMF C3 H6 N6



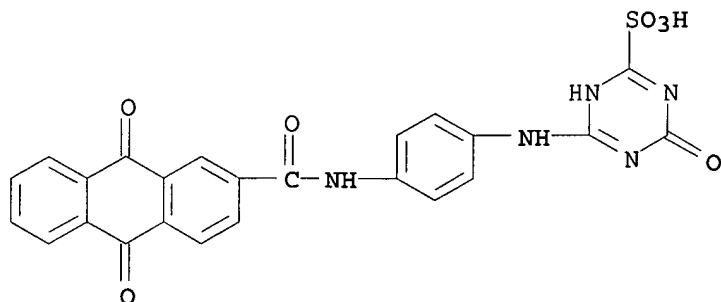
CM 2

CRN 50-00-0

CMF C H2 O

H₂C=O

IT 821786-09-8
 (dispersant; adsorption of acidic functional group-containing organic dye or triazine dispersants on organic pigments for coatings showing good storage stability and water resistance)
 RN 821786-09-8 HCAPLUS
 CN 1,3,5-Triazine-2-sulfonic acid, 6-[[4-[[[(9,10-dihydro-9,10-dioxo-2-anthracenyl)carbonyl]amino]phenyl]amino]-1,4-dihydro-4-oxo- (9CI)
 (CA INDEX NAME)



IC ICM C09B067-20
 ICS C09B067-46
 CC 42-6 (Coatings, Inks, and Related Products)
 IT **Aminoplasts**
 (acrylic; adsorption of acidic functional group-containing organic dye or triazine dispersants on organic pigments for coatings showing good storage stability and water resistance)
 IT **Aminoplasts**
 (adsorption of acidic functional group-containing organic dye or triazine dispersants on organic pigments for coatings showing good storage stability and water resistance)
 IT Acrylic polymers, uses
 (**aminoplast**-; adsorption of acidic functional group-containing organic dye or triazine dispersants on organic pigments for coatings showing good storage stability and water resistance)
 IT 147-14-8, Lionol Blue E 5280-68-2, Lionol Red 5620 5521-31-3, Paliogen Maroon L 3980 215247-95-3, Hostaperm Violet BL
 (adsorption of acidic functional group-containing organic dye or triazine dispersants on organic pigments for coatings showing good storage stability and water resistance)
 IT 9003-08-1, Melamine resin
 (crosslinking agent, Cymel 325, Cymel 303; adsorption of acidic functional group-containing organic dye or triazine dispersants on organic pigments for coatings showing good storage stability and water resistance)
 IT 28901-96-4 135258-47-8 821786-08-7 821786-09-8
 (dispersant; adsorption of acidic functional group-containing organic dye or triazine dispersants on organic pigments for coatings showing good storage stability and water resistance)

L62 ANSWER 4 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:14450 HCAPLUS

DOCUMENT NUMBER: 142:116183

TITLE: Aqueous dispersions of microparticles having a nanoparticulate phase and coating compositions

INVENTOR(S): containing the same
Faler, Dennis L.; Kulfan, Anthony D.; O'Dwyer,
James B.; Decker, Eldon L.; Woodworth, Brian
E.; Rardon, Lori S.
PATENT ASSIGNEE(S): PPG Industries Ohio, Inc., USA
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005000914	A1	20050106	WO 2004-US20412	2004 0624

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,
ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,
PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH,
CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI,
CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-482167P P
2003
0624

AB The invention is directed to an aqueous dispersion of microparticles without requiring **hydrophilic** dispersants comprising nanoparticulates, and to methods of preparing the dispersion, as well as to coating compns. containing such dispersions. The dispersion is prepared by (a) providing a plurality of nanoparticulates having an average particle size of 300 nm or less (such as inorg. fillers and organic pigments); (b) admixing the nanoparticulates with a solventborne water-dispersible polymer or with (1) one or more polymerizable ethylenically unsatd. monomers; and/or (2) a mixture of one or more polymerizable unsatd. monomers with one or more polymers; and/or (3) one or more polymers, to form an admixt.; (c) subjecting the admixt. to high stress shear conditions in the presence of either an organic solvent or an aqueous medium to particularize the admixt. into microparticles; and (d) optionally, polymerizing the ethylenically unsatd. monomers under free radical polymerization conditions. A typical dispersion was manufactured by mixing water 256.8, Igepal CO-897 3.4, soya lecithin 4.8, dimethylethanolamine 6.3, dodecylbenzenesulfonic acid (70% iso-PrOH solution) 6.9, 3000:1831.5 polybutylene oxide-tetramethylxylene diisocyanate copolymer hydroxyethyl methacrylate adduct mixture with Bu acrylate (I) 144, 720:3800:1960:720 adipic acid-1,6-hexanediol-maleic anhydride copolymer mixture with I and hydroxypropyl methacrylate 48, Cymel 303 36, ethylene glycol dimethacrylate 7.2, Me methacrylate 14.4, Isopar K 24, and nanosize C.I. Pigment Blue 15:3 dispersion 210 1 h in a microfluidizer, rinsing the microfluidizer with 36 g water,

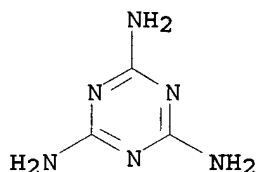
adjusting the temperature to 30°, adding Na metabisulfite 0.6, ferrous ammonium sulfate 0.01, and water 7.2 g, adding 0.5 g 70% tert-Bu hydroperoxide and 14.4 g water in 30 min (temperature increased to 37°), cooling to 28°, and adding 0.4 g dimethylethanolamine and 0.8 g water.

IT 9003-08-1, Cymel 303
 (Cymel 303, microparticulates; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
 RN 9003-08-1 HCAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI)
 (CA INDEX NAME)

CM 1

CRN 108-78-1

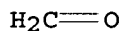
CMF C3 H6 N6



CM 2

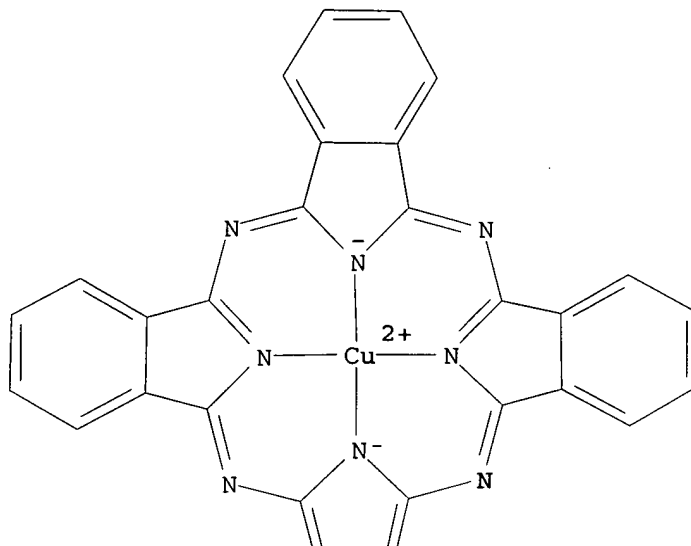
CRN 50-00-0

CMF C H2 O

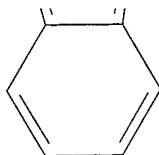


IT 147-14-8, C.I. Pigment Blue 15:3
 (aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
 RN 147-14-8 HCAPLUS
 CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,κN32]-, (SP-4-1)- (9CI)
 (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



- IC ICM C08F002-16
ICS C08F002-44; C08F292-00; C08L051-10; C09D151-10
- CC 42-10 (**Coatings**, Inks, and Related Products)
- ST **hydrophilic** dispersant free coating microparticulate dispersion nanoparticulate filler pigment; acrylic polyester coating microparticulate dispersion nanoparticulate pigment; polyurethane acrylic coating microparticulate dispersion nanoparticulate pigment
- IT Carbon black, uses
(Emperor 2000; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyurethanes, uses
(acrylic-polyamine-polyoxyalkylene-, microparticulates; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyoxyalkylenes, uses
(acrylic-polyamine-polyurethane-, microparticulates; aqueous dispersions of microparticles having a nanoparticulate pigment

- or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyurethanes, uses
(acrylic-polyester-polyoxyalkylene-, microparticulates; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyoxyalkylenes, uses
(acrylic-polyester-polyurethane-, microparticulates; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyurethanes, uses
(acrylic-polyoxyalkylene-polyurea-, microparticulates; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyamines
Polyesters, uses
Polyureas
(acrylic-polyoxyalkylene-polyurethane-, microparticulates; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyoxyalkylenes, uses
(acrylic-polyurea-polyurethane-, microparticulates; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Fillers
Nanoparticles
Pigments, nonbiological
(aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Oxides (inorganic), uses
(aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Coating materials
(dispersion; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Acrylic polymers, uses
Aminoplasts
Polyesters, uses
Polyethers, uses
Polyurethanes, uses
(microparticulates; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyurethanes, uses
(polyamine-polyoxyalkylene-, block, acrylates, microparticulate dispersion precursor; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyurethanes, uses
(polyamine-polyoxyalkylene-polyurea-, block, acrylates, microparticulate dispersion precursor; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase

- for coating compns. without **hydrophilic** dispersants)
- IT Polyureas
(polyamine-polyoxyalkylene-polyurethane-, block, acrylates, microparticulate dispersion precursor; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyoxyalkylenes, uses
(polyamine-polyurea-polyurethane-, block, acrylates, microparticulate dispersion precursor; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyoxyalkylenes, uses
(polyamine-polyurethane-, block, acrylates, microparticulate dispersion precursor; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyurethanes, uses
(polyoxyalkylene-, acrylates, microparticulate dispersion precursor; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyurethanes, uses
(polyoxyalkylene-polyurea-, block, acrylates, microparticulate dispersion precursor; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyamines
(polyoxyalkylene-polyurea-polyurethane-, block, acrylates, microparticulate dispersion precursor; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT Polyamines
(polyoxyalkylene-polyurethane-, block, acrylates, microparticulate dispersion precursor; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT 9003-08-1, Cymel 303
(Cymel 303, microparticulates; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT 1309-37-1, C.I. Pigment Red 101, uses
(Sicotrans Red L2817; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT 51274-00-1, Sicotrans Yellow L 1918
(Sicotrans Yellow L 1918, Sicotrans Yellow L1918; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT 147-14-8, C.I. Pigment Blue 15:3 980-26-7, C.I. Pigment Red 122 1314-23-4, Zirconia, uses 1314-36-9, Yttrium oxide, uses 1332-37-2, Iron oxide, uses 1344-28-1, Alumina, uses 7631-86-9, Silica, uses 13463-67-7, Titania, uses 20281-00-9, Cesium oxide 79953-85-8, C.I. Pigment Yellow 128
(aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT 25036-16-2, Butyl acrylate-methacrylic acid-styrene copolymer 820250-24-6, AR 210

(coating binder; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)

- IT 868-77-9DP, reaction products with polyurethanes 130055-99-1DP, Polybutylene oxide-tetramethylxylylene diisocyanate copolymer, reaction products with hydroxyethyl methacrylate 582300-34-3P, Adipic acid-1,6-hexanediol-isophthalic acid-maleic anhydride copolymer 819837-35-9DP, Diethanolamine-dimethylolpropionic acid-4,4'-methylenebis(cyclohexyl isocyanate)-polybutylene oxide block copolymer, reaction products with hydroxyethyl methacrylate 819837-36-0DP, reaction products with hydroxyethyl methacrylate 819837-38-2DP, reaction products with hydroxyethyl methacrylate (microparticulate dispersion precursor; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT 37953-21-2P, Butyl acrylate-glycidyl methacrylate-methyl methacrylate-styrene copolymer (microparticulate dispersion precursor; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)
- IT 34150-22-6P, Butyl acrylate-ethylene glycol dimethacrylate-methyl methacrylate copolymer 819837-39-3P 819837-41-7P 819837-43-9P 819837-44-0P 820234-03-5P 820234-05-7P (microparticulates; aqueous dispersions of microparticles having a nanoparticulate pigment or filler phase for coating compns. without **hydrophilic** dispersants)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L62 ANSWER 5 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:1127443 HCAPLUS

DOCUMENT NUMBER: 142:58418

TITLE: **Hydrophilic coloring**
matter for recording image, **aqueous coloring** agent for recording image, method and device for recording image

INVENTOR(S): Nakamura, Michiei; Koiso, Hideyuki; Sakai, Naoyuki; Zama, Yoshiyuki; Nogami, Atsushi; Shimanaka, Hiroyuki; Sasaki, Seishichi; Saikatsu, Hiroaki

PATENT ASSIGNEE(S): Dainichiseika Color & Chemicals Mfg. Co., Ltd., Japan

SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
WO 2004111135	A1	20041223	WO 2004-JP8204	

2004
0611

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,

MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,
PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH,
CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI,
CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
US 2005014885 A1 20050120 US 2004-863257 2004
0609
JP 2005023311 A2 20050127 JP 2004-173927 2004
0611
US 2005235874 A1 20051027 US 2005-522193 2005
0124
PRIORITY APPLN. INFO.: JP 2003-167523 A 2003
0612
JP 2003-164751 A 2003
0610
WO 2004-JP8204 W 2004
0611

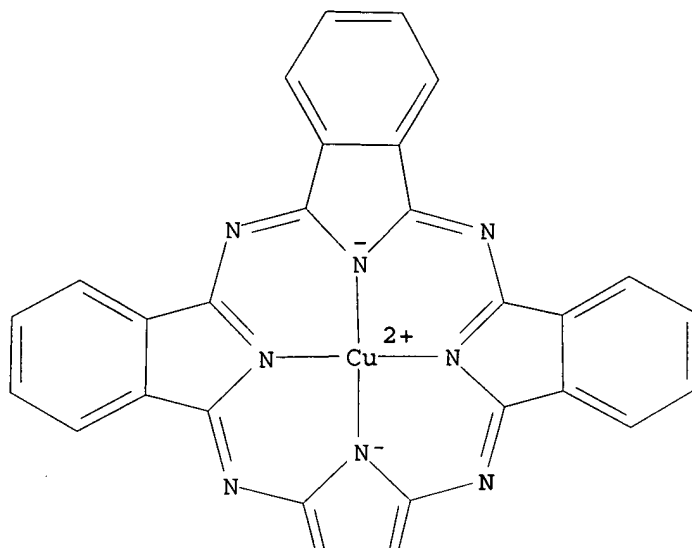
OTHER SOURCE(S): MARPAT 142:58418

AB A **hydrophilic coloring** matter is represented
by the following general formula: [organic **pigment**
]-[connecting group]-[**hydrophilic** compound], wherein [organic
pigment] is a **hydrophobic** coloring matter having no
hydrophilic group in itself, [connecting group] is a group
connecting the above [organic **pigment**] with the [
hydrophilic compound] and also interrupting the influence of
[**hydrophilic** compound] upon the above [organic
pigment], and [**hydrophilic** compound] is an
anionic, cationic, and/or nonionic **hydrophilic** compound
The above **hydrophilic coloring** matter can form
an image being excellent in **printing** characteristics
such as chroma, gloss, d., lightfastness and abrasion resistance
and can provide an ink being excellent in phys.
properties such as long period storage stability and stability on
a machine.

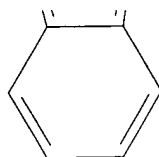
IT 147-14-8DP, C.I. Pigment Blue 15, trimellitic acid
amidomethyl derivs. 475-71-8DP, C.I. Pigment Yellow 24,
trimellitic acid amidomethyl derivs. 1047-16-1DP, C.I.
Pigment Violet 19, trimellitic acid amidomethyl derivs.
(preparation of **hydrophilic organic pigments** for
water-thinned ink-jet inks
)

RN 147-14-8 HCAPLUS
CN Copper, [29H,31H-phthalocyaninato(2-)-
κN29,κN30,κN31,κN32]-, (SP-4-1)- (9CI)
(CA INDEX NAME)

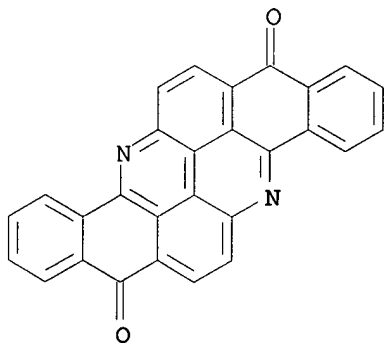
PAGE 1-A



PAGE 2-A

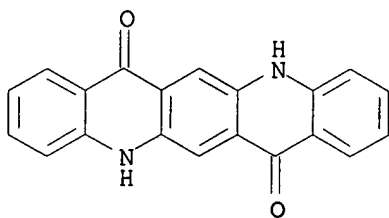


RN 475-71-8 HCAPLUS
CN Benzo[h]benz[5,6]acridino[2,1,9,8-klmna]acridine-8,16-dione (9CI)
(CA INDEX NAME)



RN 1047-16-1 HCAPLUS

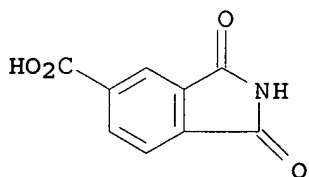
CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
(CA INDEX NAME)



IT 20262-55-9, Trimellitimide 809279-79-6
(preparation of hydrophilic organic pigments for
water-thinned ink-jet inks
)

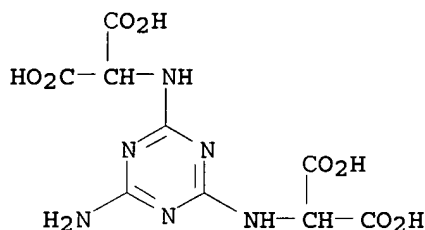
RN 20262-55-9 HCAPLUS

CN 1H-Isoindole-5-carboxylic acid, 2,3-dihydro-1,3-dioxo- (9CI) (CA
INDEX NAME)



RN 809279-79-6 HCAPLUS

CN Propanedioic acid, 2,2'-[(6-amino-1,3,5-triazine-2,4-
diyl)diimino]bis- (9CI) (CA INDEX NAME)



IC ICM C09B069-00

ICS C09B005-22; C09B047-16; C09B048-00; B41M005-00; C09D011-00

CC 42-12 (Coatings, Inks, and Related Products)

ST hydrophilic org pigment jet
printing ink storage stability; lightfastness
hydrophilic pigment jet
printing ink

IT Pigments, nonbiological
(hydrophilic organic pigments for
water-thinned ink-jet inks
with good lightfastness)

IT Inks
(jet-printing, water-thinned;
hydrophilic organic pigments for water

-thinned ink-jet inks with good lightfastness)

IT 147-14-8DP, C.I. Pigment Blue 15, trimellitic acid amidomethyl derivs. 475-71-8DP, C.I. Pigment Yellow 24, trimellitic acid amidomethyl derivs. 1047-16-1DP, C.I. Pigment Violet 19, trimellitic acid amidomethyl derivs. (preparation of hydrophilic organic pigments for water-thinned ink-jet inks)

IT 20262-55-9, Trimellitimide 809279-79-6 (preparation of hydrophilic organic pigments for water-thinned ink-jet inks)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L62 ANSWER 6 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:1035733 HCAPLUS

DOCUMENT NUMBER: 142:30178

TITLE: Stable pigment dispersions for curable staining compositions for use in manufacture of color filters

INVENTOR(S): Nakamura, Kazuhiko

PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 80 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

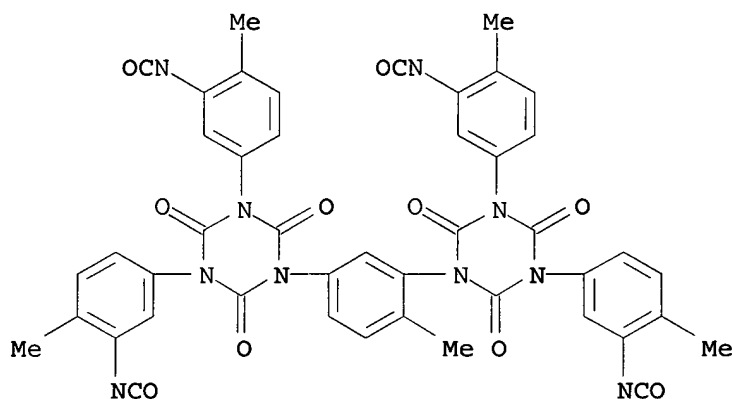
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

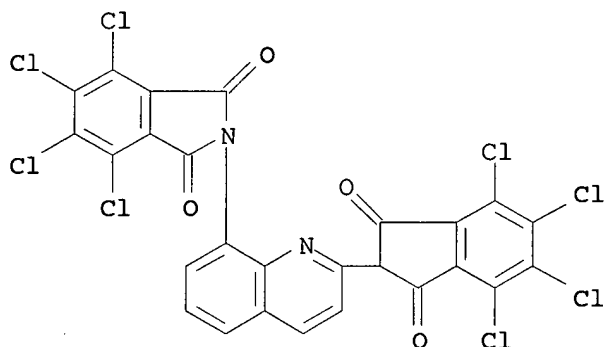
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004339358	A2	20041202	JP 2003-137511	2003 0515
PRIORITY APPLN. INFO.:				2003 0515

AB The dispersions providing high-d. color stain at minimal dispersant use, contain (A) pigments, (B) dispersants which are polymers having main chain structure at least derived from polymerized diisocyanate or/and triisocyanate compds. and a polyester chain with the absence of acid functional group and polyether chain, (C) copolymers at least having structural units not containing acid functional group having SP value (method given) ≥ 10 and epoxy group-containing structural units connected to each and other as co-dispersants and binders, and (D) organic solvents where the staining compns. contain the dispersions and curable resins. Thus, preparing a diethylene glycol di-Me ether solution containing 32.5% a copolymer of N-phenylmaleimide, benzyl methacrylate and glycidyl methacrylate (acid number < 3 mg-KOH/g; weight-average mol. weight 7500), mixing 40 parts this solution with C.I. Pigment Yellow 138 30, a dispersant made from the reaction product of a decanol-initiated polycaprolactone, Desmodur IL, and 1,12-diaminododecane, 30, and propylene glycol monomethyl ether acetate 200 parts gave a pigment dispersion having good dispersibility.

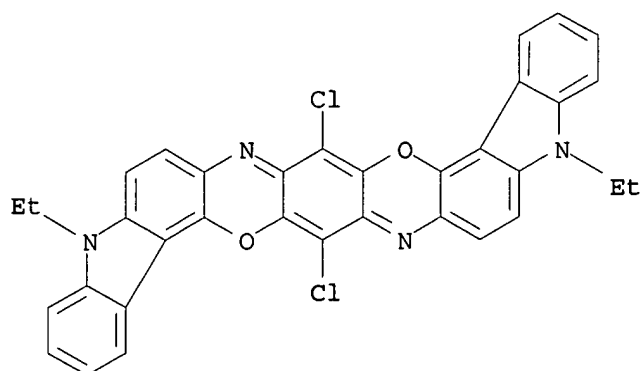
IT 188128-09-8DP, reaction products with polycaprolactone
decyl ester and diamines
(manufacture of pigment dispersions for curable staining compns. for
use in manufacture of color filters)
RN 188128-09-8 HCAPLUS
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,1'-(4-methyl-1,3-
phenylene)bis[3,5-bis(3-isocyanato-4-methylphenyl)- (9CI) (CA
INDEX NAME)



IT 30125-47-4, C.I. Pigment Yellow 138 215247-95-3,
C.I. Pigment Violet 23
(manufacture of pigment dispersions for curable staining compns. for
use in manufacture of color filters)
RN 30125-47-4 HCAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 4,5,6,7-tetrachloro-2-[2-(4,5,6,7-
tetrachloro-2,3-dihydro-1,3-dioxo-1H-inden-2-yl)-8-quinoliny]-
(9CI) (CA INDEX NAME)



RN 215247-95-3 HCAPLUS
CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-
diethyl-5,15-dihydro- (9CI) (CA INDEX NAME)



- IC ICM C09D017-00
ICS B01F017-52; B41J002-01; C09B067-20; C09B067-46; C09D011-00;
G02B005-20
- CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and
Other Reprographic Processes)
Section cross-reference(s): 42, 46
- IT **Inks**
(**jet-printing**; manufacture of pigment
dispersions for curable staining compns. for use in manufacture of
color filters)
- IT 4843-89-4DP, 1,2-**Diaminododecane**, reaction products with
polycaprolactone decyl ester and TDI pentamer
(dispersant; manufacture of pigment dispersions for curable staining
compns. for use in manufacture of color filters)
- IT 54986-73-1DP, Desmodur IL, reaction products with polycaprolactone
decyl ester and diamines 104673-46-3DP, reaction products with
polyisocyanate and diamines 105009-20-9DP, reaction products
with polyisocyanate and diamines **188128-09-8DP**, reaction
products with polycaprolactone decyl ester and diamines
(manufacture of pigment dispersions for curable staining compns. for
use in manufacture of color filters)
- IT 920-46-7, Methacrylic chloride 2859-67-8, 3-Pyridinepropanol
5036-48-6, 1-(3-**Aminopropyl**)imidazole
(manufacture of pigment dispersions for curable staining compns. for
use in manufacture of color filters)
- IT 147-14-8, C.I. Pigment Blue 15:6 1328-53-6, C.I. Pigment Green 7
4051-63-2, C.I. Pigment Red 177 5567-15-7, C.I. Pigment Yellow
83 14302-13-7, C.I. Pigment Green 36 25157-64-6, C.I. Pigment
Yellow 150 **30125-47-4**, C.I. Pigment Yellow 138
36888-99-0, C.I. Pigment Yellow 139 84632-65-5, C.I. Pigment Red
254 **215247-95-3**, C.I. Pigment Violet 23
(manufacture of pigment dispersions for curable staining compns. for
use in manufacture of color filters)

L62 ANSWER 7 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:986193 HCAPLUS
DOCUMENT NUMBER: 141:425392
TITLE: Pigment mixtures for **inks** with good
light and ozone resistance and **ink-
jet printing** method
INVENTOR(S): Kitayama, Hirokazu; Fujii, Takafumi
PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.
CODEN: JKXXAF

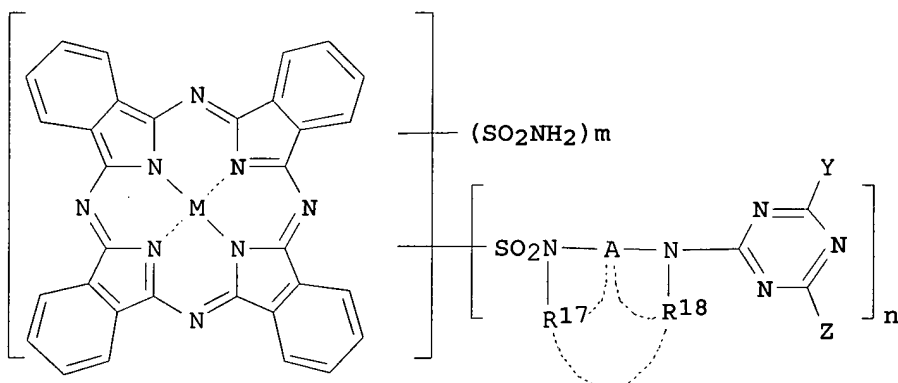
DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004323605	A2	20041118	JP 2003-117835	2003 0423

PRIORITY APPLN. INFO.: JP 2003-117835

2003
0423

OTHER SOURCE(S): MARPAT 141:425392
 GI



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AB Title mixts. comprise phthalocyanine pigments I containing ≥ 1 unsubstituted sulfamoyl groups and phthalocyanine pigments I containing ≥ 1 substituted sulfamoyl group having ionic **hydrophilic** groups, wherein M = H, metal, metal oxide, metal hydroxide, or metal halogen; R17, R18 = H, (un)substituted alkyl, cycloalkyl, aryl, heterocycle, aralkyl, or alkenyl; A = crosslinking group (R17, R18, and A can be form a ring); Y, Z = halogen, OH, sulfonic acid, carboxylic, amino, (un)substituted alkoxy, cycloalkyloxy, aryloxy, heterocyclic oxy, aralkyloxy, alkenyloxy, alkylamino, cycloalkylamino, arylamino, heterocyclic amino, aralkylamino, alkenylamino, dialkylamino, alkylthio, arylthio, heterocyclic thio, aralkylthio, or alkenylthio (at least one of Y and Z has substituents of sulfonic acid, carboxylic, or ionic **hydrophilic** groups); and m, n = 1-3 (m + n = 2-4). Thus, 15.6 parts copper phthalocyanine chlorosulfone compound was dissolved in aqueous ammonia, 4.3 parts 2-[[4-amino-6-[(2-aminoethyl)amino]-1,3,5-triazin-2-yl]amino]-1,4-benzenedisulfonic acid (preparation given) was added therein and reacted to give copper phthalocyanine having 2 substituted sulfamoyl groups and 2 unsubstituted sulfamoyl groups (λ_{\max} = 605.5 nm), 1.3 parts

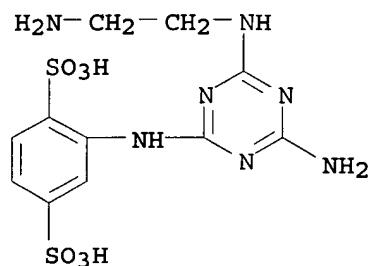
of which was mixed with aqueous sodium hydroxide 79.6, glycerin 5.0, urea 5.0, N-methyl-2-pyrrolidone 4.0, isopropanol alc. 3.0, butylcarbitol 2.0, and Surfynol 104PG50 0.1 parts, and used for **printing** on a paper with an **ink-jet printer**, showing good color and light, ozone, and humidity resistance.

IT 742062-32-4P

(intermediate in substituted pigment preparation; pigment compns. for **inks** with good light and ozone resistance and **ink-jet printing** method)

RN 742062-32-4 HCAPLUS

CN 1,4-Benzenedisulfonic acid, 2-[[4-amino-6-[(2-aminoethyl)amino]-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

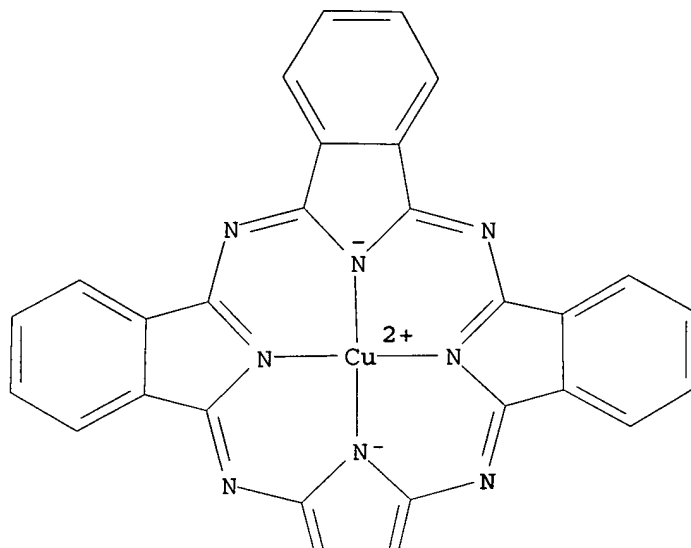


IT 147-14-8DP, Copper phthalocyanine, chlorosulfonated, reaction products with disulfonated benzeneamino and ethylenediamine substituted triazine compds. **742062-32-4DP**, reaction products with chlorosulfonated copper phthalocyanine (pigment; pigment compns. for **inks** with good light and ozone resistance and **ink-jet printing** method)

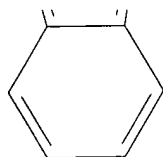
RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,κN32]-, (SP-4-1)- (9CI) (CA INDEX NAME)

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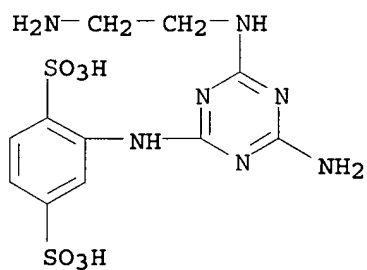


PAGE 2-A



RN 742062-32-4 HCAPLUS

CN 1,4-Benzenedisulfonic acid, 2-[[4-amino-6-[(2-aminoethyl)amino]-1,3,5-triazin-2-yl]amino] - (9CI) (CA INDEX NAME)

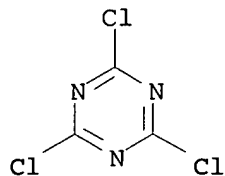


IT 108-77-0, Cyanuric chloride 147-14-8, Copper phthalocyanine
(reactant in substituted pigment preparation; pigment compns. for

inks with good light and ozone resistance and
ink-jet printing method)

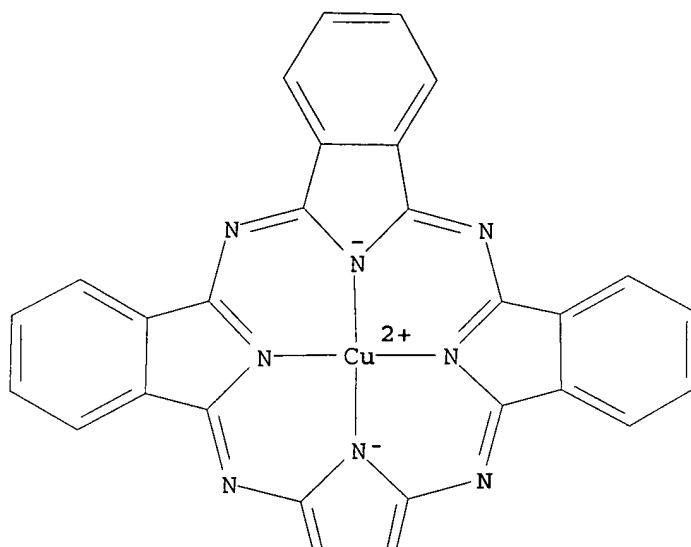
RN 108-77-0 HCAPLUS

CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)

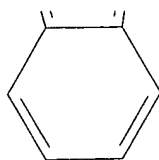


RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-
 κ N29, κ N30, κ N31, κ N32]-, (SP-4-1)- (9CI)
(CA INDEX NAME)



PAGE 1-A



PAGE 2-A

IC ICM C09B067-22

USHA SHRESTHA EIC 1700 REM 4B28

ICS B41J002-01; B41M005-00; C09B047-26; C09D011-00
CC 42-6 (Coatings, Inks, and Related Products)
ST pigment compn **ink** light ozone resistance **jet**
printing; sulfamoyl contg copper phthalocyanine mixt
pigment **ink jet ink**
IT Paper
(PR 101 and KA 420PSK, gloss, substrates, information transfer;
pigment compns. for **inks** with good light and ozone
resistance and **ink-jet printing**
method)
IT Containers
(**ink**; pigment compns. for **inks** with good
light and ozone resistance and **ink-jet**
printing method)
IT Light-resistant materials
(**inks**, ozone-resistant; pigment compns. for
inks with good light and ozone resistance and
ink-jet printing method)
IT **Inks**
(**jet-printing**; pigment compns. for
inks with good light and ozone resistance and
ink-jet printing method)
IT **Inks**
(light-resistant, ozone-resistant; pigment compns. for
inks with good light and ozone resistance and
ink-jet printing method)
IT Coloring materials
Ink-jet printers
Ink-jet printing
Pigments, nonbiological
(pigment compns. for **inks** with good light and ozone
resistance and **ink-jet printing**
method)
IT **742062-32-4P**
(intermediate in substituted pigment preparation; pigment compns.
for **inks** with good light and ozone resistance and
ink-jet printing method)
IT 7719-09-7, Thionyl chloride
(pigment compns. for **inks** with good light and ozone
resistance and **ink-jet printing**
method)
IT **147-14-8DP**, Copper phthalocyanine, chlorosulfonated,
reaction products with disulfonated benzeneamino and
ethylenediamine substituted triazine compds. 7790-94-5DP,
Chlorosulfonic acid, reaction products with copper phthalocyanine
and disulfonated benzeneamino and ethylenediamine substituted
triazine compds. **742062-32-4DP**, reaction products with
chlorosulfonated copper phthalocyanine
(pigment; pigment compns. for **inks** with good light
and ozone resistance and **ink-jet**
printing method)
IT 107-15-3, Ethylenediamine, reactions **108-77-0**, Cyanuric
chloride **147-14-8**, Copper phthalocyanine 7664-41-7,
Ammonia, reactions 7790-94-5, Chlorosulfonic acid 24605-36-5
(reactant in substituted pigment preparation; pigment compns. for
inks with good light and ozone resistance and
ink-jet printing method)

DOCUMENT NUMBER: 141:316001
 TITLE: **Ink-jet inks**
 with improved water and light resistance
 INVENTOR(S): Uraki, Hisashi; Fujimatsu, Shinya; Sato,
 Shinichi; Hazama, Seiji; Nakano, Kaori; Iida,
 Yasuharu
 PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004277519	A2	20041007	JP 2003-69124	2003 0314

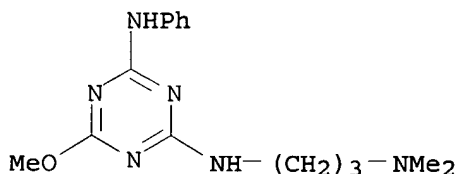
PRIORITY APPLN. INFO.: JP 2003-69124
 2003
 0314

AB The **inks**, showing viscosity 3-15 mPa-s at temps. of **printer heads on jet-printing**, contain pigments, phosphoric acid group-containing polymers with Mw 1000-50,000, and solvents with b.p. $\geq 130^\circ$. Thus, an **ink** containing 65 parts Bu lactate (I) and 35 parts of a dispersion comprising Lionol Blue FG 7351 (cyan pigment) 15, N,N-**dimethylaminopropylamine**-containing Cu phthalocyanine pigment 5, 40%-solids acid phosphoxyethyl methacrylate-Bu methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-Me methacrylate copolymer 13, and I 67 parts showed good jet stability, redissoln. properties, storage stability at 40° for 1 mo, and adhesion to a receptor sheet.

IT **442526-48-9P**
 (basic group-containing pigment; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)

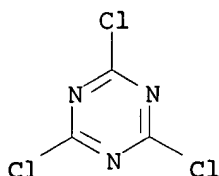
RN 442526-48-9 HCAPLUS

CN 1,3,5-Triazine-2,4-diamine, N-[3-(dimethylamino)propyl]-6-methoxy-N'-phenyl- (9CI) (CA INDEX NAME)

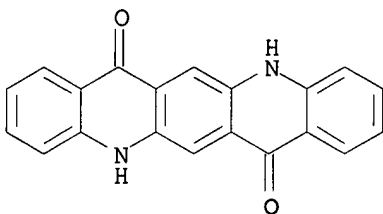


IT **108-77-0**, Cyanuric chloride **1047-16-1D**, Quinacridone, chloroacetoamidomethylated (for basic pigment preparation; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)

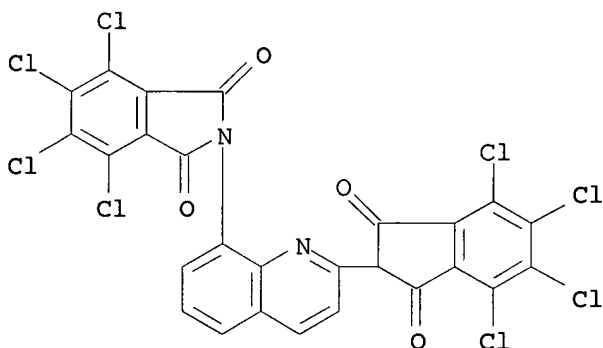
RN 108-77-0 HCAPLUS
 CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)



RN 1047-16-1 HCAPLUS
 CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
 (CA INDEX NAME)



IT 30125-47-4, Lionogen Yellow 1010
 (pigment; ink-jet inks containing
 phosphoric acid group-containing polymers with good dispersibility
 and low viscosity for forming water- and light-resistant
 images)
 RN 30125-47-4 HCAPLUS
 CN 1H-Isoindole-1,3(2H)-dione, 4,5,6,7-tetrachloro-2-[2-(4,5,6,7-
 tetrachloro-2,3-dihydro-1,3-dioxo-1H-inden-2-yl)-8-quinolinyl]-
 (9CI) (CA INDEX NAME)



IC ICM C09D011-00
 ICS B41J002-01; B41M005-00; C09B035-033; C09B035-10; C09B047-26;
 C09B048-00; C09B057-00
 CC 42-12 (Coatings, Inks, and Related Products)
 ST ink pigment dispersibility phosphoric acid polymer;
 water resistance ink butyl lactate solvent; pigment
 methylaminopropylamine copper phthalocyanine low viscosity
 IT Carbon black, uses

- (Printex 55, pigment; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT Polyvinyl butyrals
(S-Lec BL 1, fixing resin; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT Polysiloxanes, uses
(acrylic, fixing resin; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT Glycols, uses
(ethers, acetates, solvent; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT Glycols, uses
(ethers, solvent; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT Acrylic polymers, uses
Fluoropolymers, uses
Polyesters, uses
Polysiloxanes, uses
Polyurethanes, uses
(fixing resin; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT Ethers, uses
(glycol, acetates, solvent; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT Ethers, uses
(glycol, solvent; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT Dispersing agents
Pigments, nonbiological
Solvents
(**ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT Water-resistant materials
(**jet-printing inks; ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT **Inks**
(**jet-printing, anticlogging, storage-stable; ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)

- IT **Inks**
(**jet-printing**, water-resistant; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT Polymers, uses
(phosphoric acid group-containing, dispersant; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT Acrylic polymers, uses
(polysiloxane-, fixing resin; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT 68324-29-8P 442526-47-8P **442526-48-9P** 442532-87-8P
(basic group-containing pigment; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT 158808-90-3P, Acid phosphoxyethyl methacrylate-butyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate copolymer
(dispersant; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT 9003-22-9, Vinyl acetate-vinyl chloride copolymer
(fixing resin; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT 62-53-3, Aniline, reactions 108-77-0, Cyanuric chloride 109-01-3, N-Methylpiperazine 109-55-7 147-14-8D, Copper phthalocyanine, chlorosulfonated **1047-16-1D**, Quinacridone, chloroacetoamidomethylated 1331-47-1, Dichlorobenzidine 442526-49-0
(for basic pigment preparation; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT 147-14-8, Lionol Blue FG 7351 980-26-7, Lionogen Magenta 5750 **30125-47-4**, Lionogen Yellow 1010
(pigment; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)
- IT 50-21-5D, Lactic acid, esters 138-22-7, Butyl lactate 629-38-9, Diethylene glycol monomethyl ether acetate 84540-57-8, Propylene glycol monomethyl ether acetate
(solvent; **ink-jet inks** containing phosphoric acid group-containing polymers with good dispersibility and low viscosity for forming water- and light-resistant images)

L62 ANSWER 9 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:584492 HCAPLUS

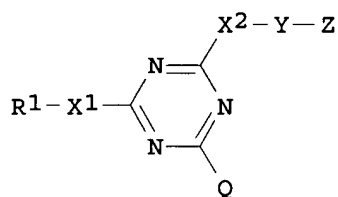
DOCUMENT NUMBER: 141:125120

TITLE: Pigment dispersing agents and pigment composition containing the dispersing agents

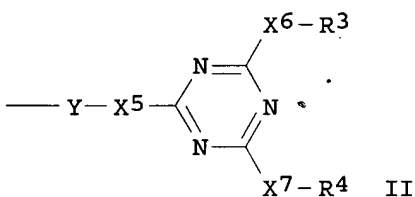
INVENTOR(S): Kamikubo, Takashi; Tanabe, Daisuke; Sai, Tetsuya
 PATENT ASSIGNEE(S): Toyo Ink Manufacturing Co., Ltd., Japan
 SOURCE: Eur. Pat. Appl., 18 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1439211	A1	20040721	EP 2004-250250	2004 0119
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004217842	A2	20040805	JP 2003-8992	2003 0117
US 2004147633	A1	20040729	US 2004-756350	2004 0114
CN 1517414	A	20040804	CN 2004-10002717	2004 0117
PRIORITY APPLN. INFO.:			JP 2003-8992	A 2003 0117

OTHER SOURCE(S): MARPAT 141:125120
 GI



I



II

AB A pigment dispersing agent comprises I, wherein X1 is -NH-, -O-, -CONH-, -SO2NH-, -CH2NH-, -CH2NHCOCH2NH- or -X3-Y-X4-, X2 and X4 are the same or different and represent -NH- or -O-, X3 is -CONH-, -SO2NH-, -CH2NH-, -NHCO- or -NHSO2-, Y is a C1-C20 alkylene group which may have a substituent, a C2-C20 alkenylene group which may have a substituent, or an arylene group which has up to 20 carbon atoms and may have a substituent, Z is -SO3M or -COOM, R1 is a heterocyclic ring residue which may have a substituent, an aromatic ring residue which may have a substituent, or II, Q is -O-R2, -NH-R2, a halogen group, -X1-R1 or -X2-Y-Z wherein X1, R1, X2, Y and Z are as defined above and R2 is a hydrogen atom, an alkyl group which may have a substituent or an alkenyl group which may have a substituent, and M is one equivalent of a monovalent to trivalent cation, wherein X5 is -NH- or -O-, X6 and X7 are the

same or different and represent -NH-, -O-, -CONH-, -SO₂NH-, -CH₂NH- or -CH₂NHCOCH₂NH-, R₃ and R₄ are the same or different and represent a heterocyclic ring residue which may have a substituent, an aromatic ring residue which may have a substituent or -Y-Z, therein Y and Z are as defined in I.

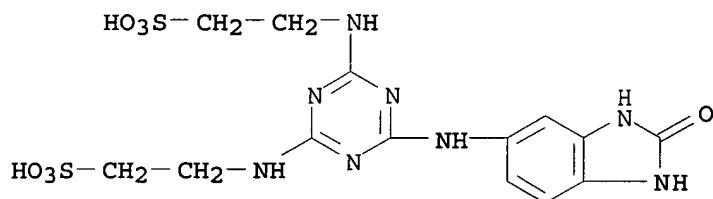
IT 724453-08-1P 724453-09-2P 724453-10-5P

724453-11-6P

(dispersing agent; pigment dispersing agents and pigment composition containing the dispersing agents)

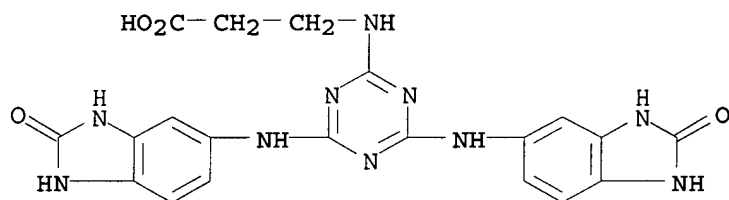
RN 724453-08-1 HCAPLUS

CN Ethanesulfonic acid, 2,2'-[[6-[(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)amino]-1,3,5-triazine-2,4-diyl]diimino]bis- (9CI) (CA INDEX NAME)



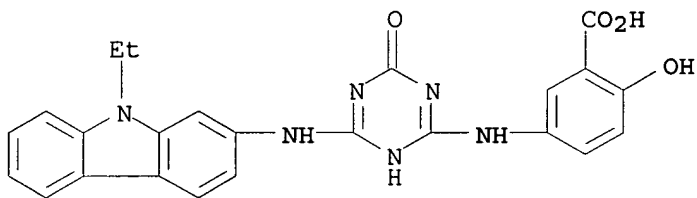
RN 724453-09-2 HCAPLUS

CN β-Alanine, N-[4,6-bis[[2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)amino]-1,3,5-triazin-2-yl]- (9CI) (CA INDEX NAME)



RN 724453-10-5 HCAPLUS

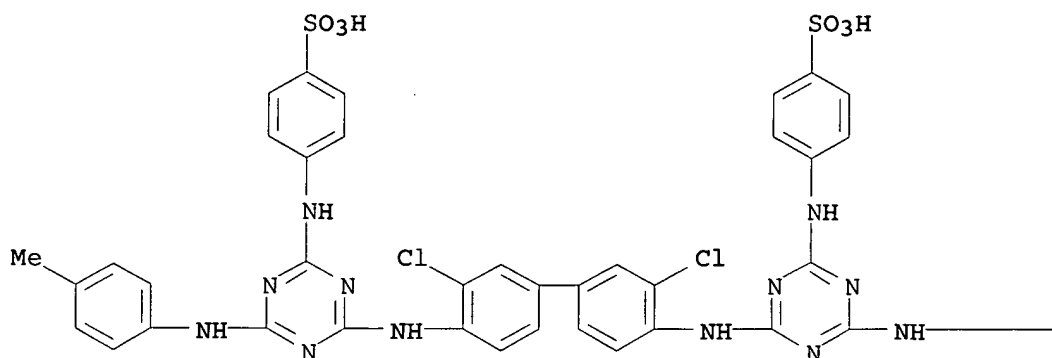
CN Benzoic acid, 5-[[6-[(9-ethyl-9H-carbazol-2-yl)amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]-2-hydroxy- (9CI) (CA INDEX NAME)



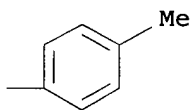
RN 724453-11-6 HCAPLUS

CN Benzenesulfonic acid, 4,4'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis[imino[6-[(4-methylphenyl)amino]-1,3,5-triazine-4,2-diyl]imino]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

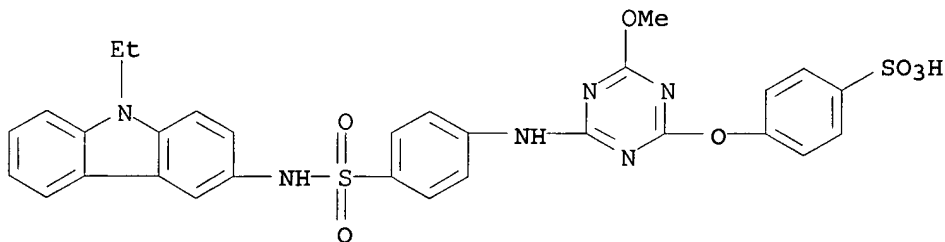


IT 724453-12-7 724453-13-8 724453-14-9
724453-15-0

(dispersing agent; pigment dispersing agents and pigment composition
containing the dispersing agents)

RN 724453-12-7 HCAPLUS

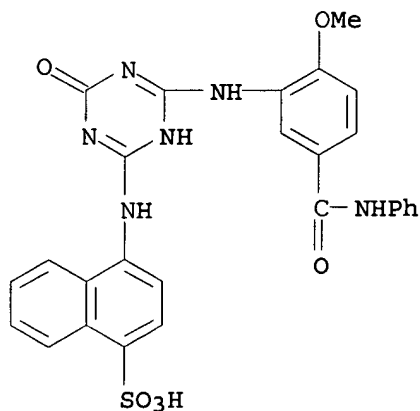
CN Benzenesulfonic acid, 4-[[4-[[4-[[[9-ethyl-9H-carbazol-3-yl]amino]sulfonyl]phenyl]amino]-6-methoxy-1,3,5-triazin-2-yl]oxy]-
(9CI) (CA INDEX NAME)



RN 724453-13-8 HCAPLUS

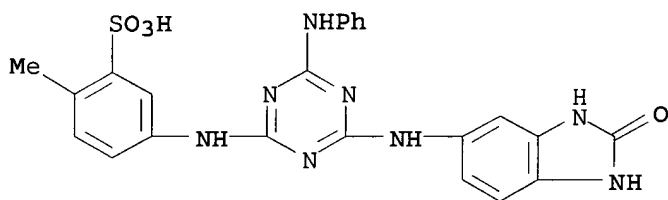
CN 1-Naphthalenesulfonic acid, 4-[[[1,4-dihydro-6-[[2-methoxy-5-
[(phenylamino)carbonyl]phenyl]amino]-4-oxo-1,3,5-triazin-2-

yl]amino]- (9CI) (CA INDEX NAME)



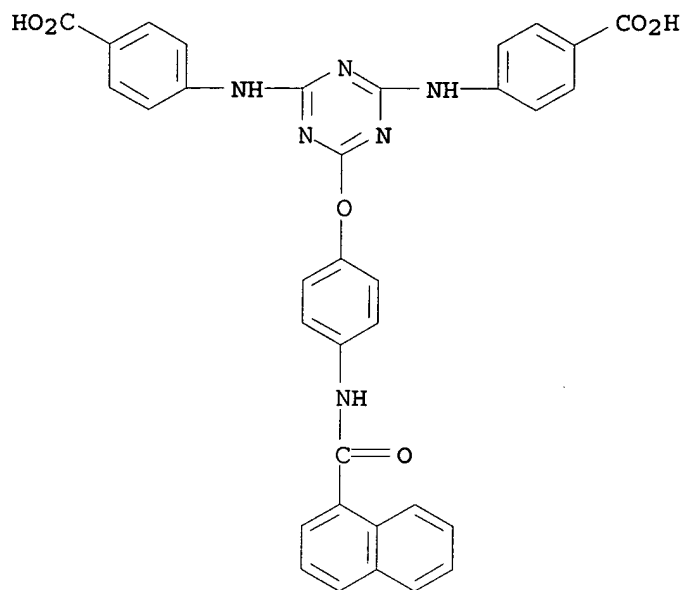
RN 724453-14-9 HCAPLUS

CN Benzenesulfonic acid, 5-[[4-[(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)amino]-6-(phenylamino)-1,3,5-triazin-2-yl]amino]-2-methyl- (9CI) (CA INDEX NAME)

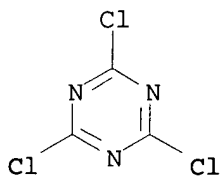


RN 724453-15-0 HCAPLUS

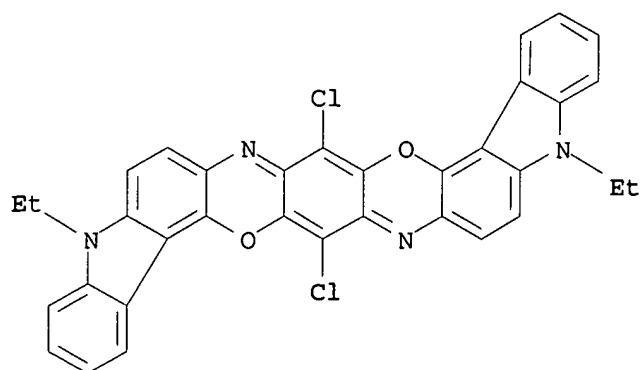
CN Benzoic acid, 4,4'-[[6-[4-[(1-naphthalenylcarbonyl)amino]phenoxy]-1,3,5-triazine-2,4-diyl]diimino]bis- (9CI) (CA INDEX NAME)



IT 108-77-0, Cyanuric chloride
 (pigment dispersing agents and pigment composition containing the
 dispersing agents)
 RN 108-77-0 HCAPLUS
 CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)



IT 215247-95-3, C.I. Pigment Violet 23
 (pigment dispersing agents and pigment composition containing the
 dispersing agents)
 RN 215247-95-3 HCAPLUS
 CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-
 diethyl-5,15-dihydro- (9CI) (CA INDEX NAME)



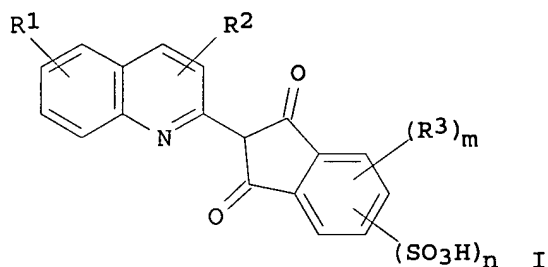
IC ICM C09D011-02
ICS C09D011-10; C08K005-3492
CC 42-6 (Coatings, Inks, and Related Products)
ST dispersing agent pigment ink coating
IT Polyurethanes, uses
(non-aqueous vehicle; pigment dispersing agents
and pigment composition containing the dispersing agents)
IT Inks
(printing; pigment dispersing agents and pigment
composition containing the dispersing agents)
IT 724453-08-1P 724453-09-2P 724453-10-5P
724453-11-6P
(dispersing agent; pigment dispersing agents and pigment composition
containing the dispersing agents)
IT 724453-12-7 724453-13-8 724453-14-9
724453-15-0
(dispersing agent; pigment dispersing agents and pigment composition
containing the dispersing agents)
IT 60-32-2, 6-Aminocaproic acid 89-57-6, 5-
Aminosalicylic acid 95-23-8 106-49-0, p-Toluidine,
reactions 107-35-7 108-77-0, Cyanuric chloride
121-57-3, p-Aminobenzenesulfonic acid 132-32-1, 3-
Amino-9-ethylcarbazole
(pigment dispersing agents and pigment composition containing the
dispersing agents)
IT 147-14-8, C.I.Pigment Blue 15:3 980-26-7, C.I.Pigment Red 122
1328-53-6, C.I.Pigment Green 7 5280-68-2, C.I.Pigment Red 146
5468-75-7, C.I.Pigment Yellow 14 51920-12-8, C.I.Pigment Red 185
77804-81-0, C.I.Pigment Yellow 180 215247-95-3,
C.I.Pigment Violet 23
(pigment dispersing agents and pigment composition containing the
dispersing agents)

L62 ANSWER 10 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:249640 HCAPLUS
DOCUMENT NUMBER: 140:272406
TITLE: Stable pigment compositions useful for gravure
inks, paints, or color filters and
dispersants therefor
INVENTOR(S): Oki, Shigeru; Yanagimoto, Hiromitsu
PATENT ASSIGNEE(S): Dainichiseika Color and Chemical Mfg. Co.,
Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF

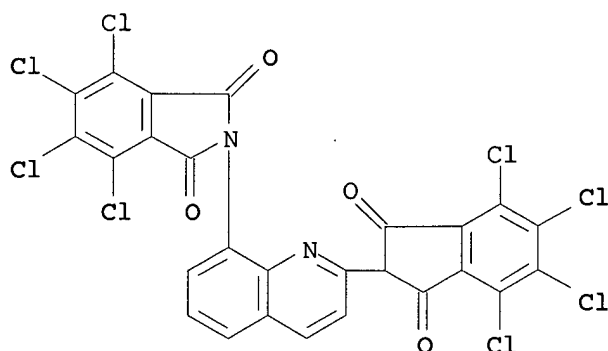
DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004091497	A2	20040325	JP 2002-241979	2002 0822
PRIORITY APPLN. INFO.:			JP 2002-204540	A 2002 0712

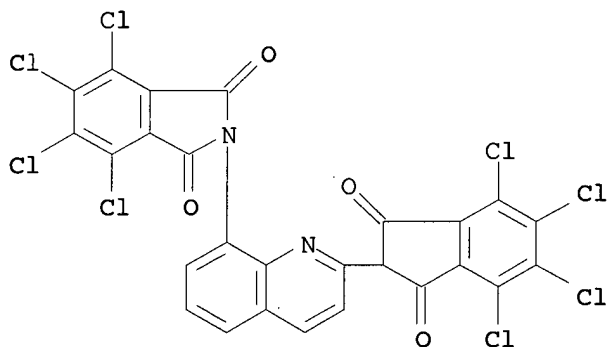
OTHER SOURCE(S): MARPAT 140:272406
 GI



- AB The dispersants are (quaternary ammonium salts, amine salts, or metal salts of) I [R1 = H, halo, OH, alkyl, (un)substituted aryl, (un)substituted phthalimide; R2 = H, OH; R3 = halo; m = 0-4; n = 0.5-4 (average value)]. Compns. comprising pigments and the dispersions are also claimed. Thus, a polyamide gravure ink containing C.I. Pigment Yellow 138 and I (R1, R2 = H; R3 = Cl; m = 4; n = 1.3; prepared by sulfonation of tetrachloroquinophthalone), showed viscosity 281 and 289 mPa-sec, initially and after 7 days, resp., and high gross when coated.
- IT 30125-47-4DP, sulfonated, optionally calcium salts or salts with tetra-Bu ammonium chloride
 (dispersants; sulfonated quinophthalone derivs. as dispersants for stable pigment compns. useful for gravure inks, paints, or color filters)
- RN 30125-47-4 HCAPLUS
- CN 1H-Isoindole-1,3(2H)-dione, 4,5,6,7-tetrachloro-2-[2-(4,5,6,7-tetrachloro-2,3-dihydro-1,3-dioxo-1H-inden-2-yl)-8-quinolinyl]-(9CI) (CA INDEX NAME)



IT 30125-47-4, C.I. Pigment Yellow 138
 (in preparation of dispersants, pigments; sulfonated quinophthalone
 derivs. as dispersants for stable pigment compns. useful for
 gravure **inks**, paints, or color filters)
 RN 30125-47-4 HCAPLUS
 CN 1H-Isoindole-1,3(2H)-dione, 4,5,6,7-tetrachloro-2-[2-(4,5,6,7-
 tetrachloro-2,3-dihydro-1,3-dioxo-1H-inden-2-yl)-8-quinolinyl]-
 (9CI) (CA INDEX NAME)

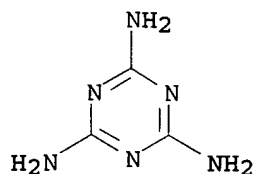


IT 9003-08-1DP, Melamine resin, reaction products with
 acrylic resins
 (paints; sulfonated quinophthalone derivs. as dispersants for
 stable pigment compns. useful for gravure **inks**,
 paints, or color filters)
 RN 9003-08-1 HCAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI)
 (CA INDEX NAME)

CM 1

CRN 108-78-1

CMF C3 H6 N6



CM 2

CRN 50-00-0

CMF C H2 O

H₂C=O

- IC ICM C09B067-20
ICS B01F017-12; C09B001-22; C09B033-147; C09B045-14; C09B045-22;
C09B047-10; C09B057-00; C09B057-04; C09B057-08; C09D011-02;
C09D017-00; G02B005-20
- CC 42-5 (Coatings, Inks, and Related Products)
Section cross-reference(s): 41, 73
- ST sulfonated chloroquinophthalone dispersant stable viscosity
pigment; gravure **inks** paint color filter pigment
dispersant quinophthalone
- IT Polyamides, uses
Polyurethanes, uses
(gravure **inks**; sulfonated quinophthalone derivs. as
dispersants for stable pigment compns. useful for gravure
inks, paints, or color filters)
- IT **Inks**
(gravure; sulfonated quinophthalone derivs. as dispersants for
stable pigment compns. useful for gravure **inks**,
paints, or color filters)
- IT Acrylic polymers, uses
(melamine-crosslinked, paints; sulfonated quinophthalone
derivs. as dispersants for stable pigment compns. useful for
gravure **inks**, paints, or color filters)
- IT **Aminoplasts**
(reaction products with acrylic resins, paints; sulfonated
quinophthalone derivs. as dispersants for stable pigment
compns. useful for gravure **inks**, paints, or color
filters)
- IT Dispersing agents
Optical filters
Paints
Pigments, nonbiological
(sulfonated quinophthalone derivs. as dispersants for stable
pigment compns. useful for gravure **inks**, paints, or
color filters)
- IT 27908-75-4DP, sulfonated, optionally salts with tetra-Bu ammonium
chloride **30125-47-4DP**, sulfonated, optionally calcium
salts or salts with tetra-Bu ammonium chloride
(dispersants; sulfonated quinophthalone derivs. as dispersants
for stable pigment compns. useful for gravure **inks**,
paints, or color filters)
- IT **30125-47-4**, C.I. Pigment Yellow 138

- (in preparation of dispersants, pigments; sulfonated quinophthalone derivs. as dispersants for stable pigment compns. useful for gravure **inks**, paints, or color filters)
- IT 27908-75-4
(in preparation of dispersants; sulfonated quinophthalone derivs. as dispersants for stable pigment compns. useful for gravure **inks**, paints, or color filters)
- IT 9003-01-4, Poly(acrylic acid)
(optical filter materials; sulfonated quinophthalone derivs. as dispersants for stable pigment compns. useful for gravure **inks**, paints, or color filters)
- IT 9003-08-1DP, Melamine resin, reaction products with acrylic resins
(paints; sulfonated quinophthalone derivs. as dispersants for stable pigment compns. useful for gravure **inks**, paints, or color filters)
- IT 1328-53-6, C.I. Pigment Green 7 4051-63-2, C.I. Pigment Red 177
14302-13-7, C.I. Pigment Green 36 25157-64-6, C.I. Pigment Yellow 150 36888-99-0, C.I. Pigment Yellow 139 52238-92-3, C.I. Pigment Red 242 84632-65-5, C.I. Pigment Red 254
(pigments; sulfonated quinophthalone derivs. as dispersants for stable pigment compns. useful for gravure **inks**, paints, or color filters)
- IT 1112-67-0DP, Tetrabutylammonium chloride, reaction products with sulfonated tetrachloroquinophthalone and C.I. Pigment Yellow 138
(sulfonated quinophthalone derivs. as dispersants for stable pigment compns. useful for gravure **inks**, paints, or color filters)

L62 ANSWER 11 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:175966 HCAPLUS

DOCUMENT NUMBER: 140:219488

TITLE: **Ink-jet inks**,
and their use in **ink** sets and
printing method

INVENTOR(S): Ogasawara, Arinori; Ishibashi, Daisuke

PATENT ASSIGNEE(S): Konica Minolta Holdings Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 45 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004067925	A2	20040304	JP 2002-231173	

2002
0808

PRIORITY APPLN. INFO.: JP 2002-231173

2002
0808

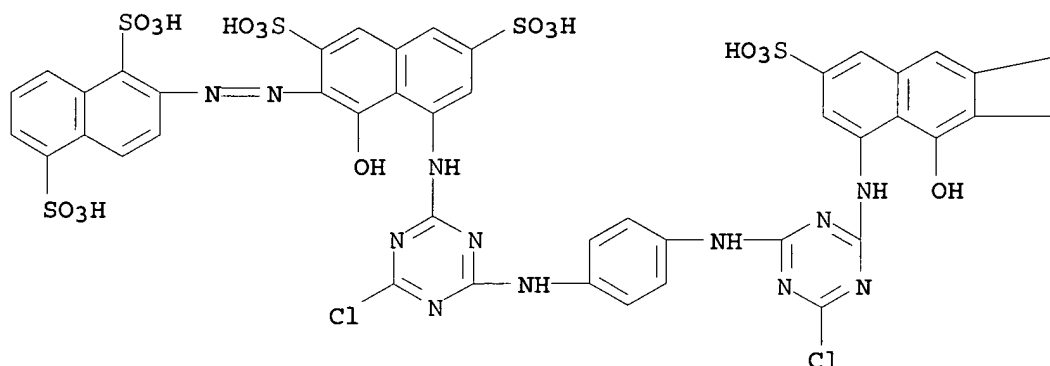
OTHER SOURCE(S): MARPAT 140:219488

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT

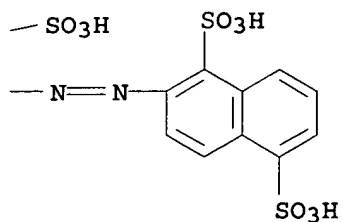
- AB The **inks** with high resistance to beading, bleeding, feathering, striking-through, and light, contain water, water-soluble organic solvents, isobutanol or tert-butanol, and (1) $[C_6R_1nH_5-nN:NC_6R_2mH_4-mNH]_2J$ ($R_1, R_2 = H$, substituent; $m = 1-4$; $n = 1-5$; $J =$ carbonyl, 2-substituted 1,3,5-triazine residue), (2) diazo compds. I ($R_4, R_5 = H$, substituent; $g, h = 1-5$), (3) N-containing polycyclic compds. II ($R_6-R_{10} = H$, substituent; $p = 1-4$; $q = 1-5$), (4) 1-naphthol substituted with $X-N:N$, $(SO_3Y)_s$, NH_2 , and R_{11r} ($r_{11} = H$, substituent; $X = Ph$, naphthyl; $r = 1-4$; $s = 1, 2$; $r + s = 5$; $Y = H^+, Na^+, K^+, Li^+, NH_4^+$, alkylammonium ion; $Z =$ carbonyl, sulfonyl, substituted triazinyl), (5) water-soluble Cu phthalocyanines, or (6) surfactants and 1-naphthol substituted with $C_6R_{12}tH_5-tN:NC_6R_{13}uH_4-uN:N$ in 2-position, R_{14w} , and NHR_{15} ($R_{12}-R_{15} = H$, substituent; $t, w = 1-5$; $u = 1-4$). The **ink** sets contain yellow **inks**, magenta **inks**, cyan **inks**, and black **inks** made of the above **inks**. The **printing** method for ordinary paper or media having **hydrophilic** polymer-containing **ink** receptor layers is carried out by using the above **inks**. Thus, ordinary paper was **jet-printed** with an aqueous **ink** containing C.I. Direct Blue 199 (Cu phthalocyanine dye), tert-butanol, solvents, and an additive to give an image with high lightfastness.
- IT 71002-20-5
(**ink** containing; bwater-thinned **ink-jet** **inks** containing isobutanol or tert-butanol for **ink** sets and **printing** method)
- RN 71002-20-5 HCAPLUS
- CN 1,5-Naphthalenedisulfonic acid, 2,2'-[1,4-phenylenebis(imino(6-chloro-1,3,5-triazine-4,2-diyl)imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediyl)azo)]bis-, octasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



● 8 Na

PAGE 1-B

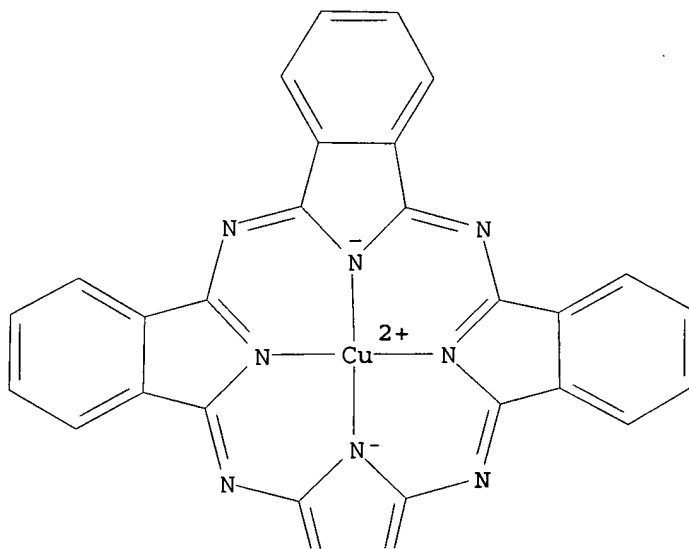


IT 147-14-8D, Copper phthalocyanine, derivs.
 50925-42-3 52238-69-4 151151-37-0
 427887-08-9
 (ink containing; water-thinned ink-jet
 inks containing isobutanol or tert-butanol for ink
 sets and printing method)

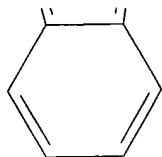
RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-
 κ N29, κ N30, κ N31, κ N32]-, (SP-4-1)- (9CI)
 (CA INDEX NAME)

PAGE 1-A



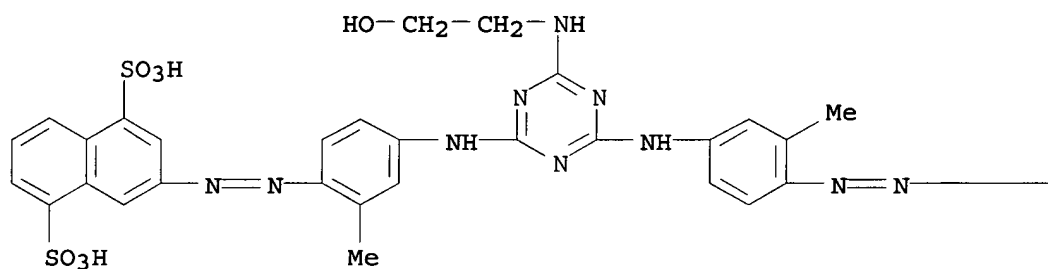
PAGE 2-A



RN 50925-42-3 HCAPLUS

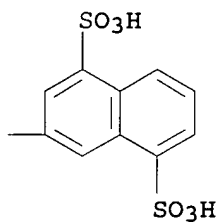
CN 1,5-Naphthalenedisulfonic acid, 3,3'-[[6-[(2-hydroxyethyl)amino]-1,3,5-triazine-2,4-diyl]bis[imino(2-methyl-4,1-phenylene)azo]]bis-, tetrasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



●4 Na

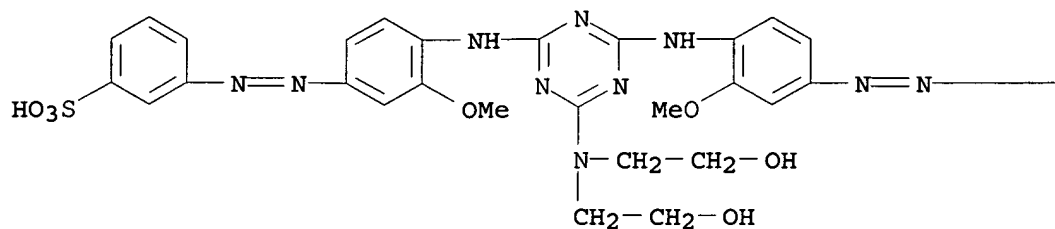
PAGE 1-B



RN 52238-69-4 HCAPLUS

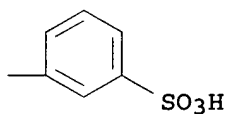
CN Benzenesulfonic acid, 3,3'-[[6-[bis(2-hydroxyethyl)amino]-1,3,5-triazine-2,4-diyl]bis[imino(3-methoxy-4,1-phenylene)azo]]bis-, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



●2 Na

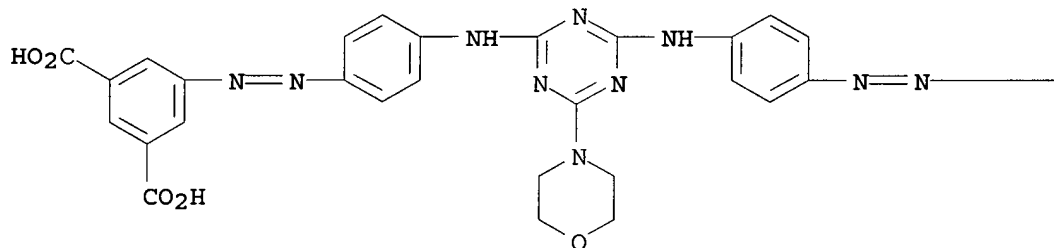
PAGE 1-B



RN 151151-37-0 HCAPLUS

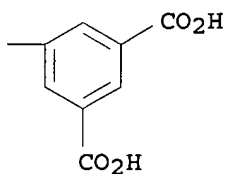
CN 1,3-Benzenedicarboxylic acid, 5,5'-[[6-(4-morpholinyl)-1,3,5-triazine-2,4-diyl]bis(imino-4,1-phenyleneazo)]bis-, tetrasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



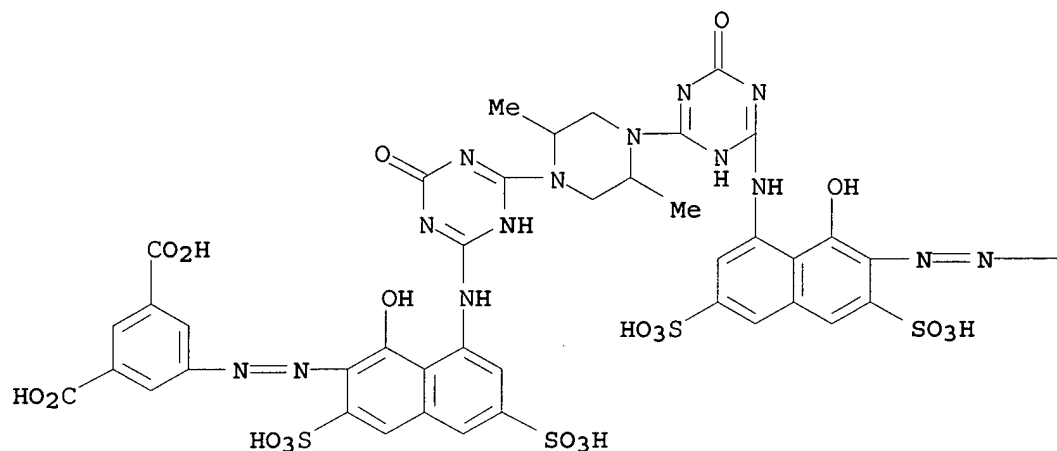
●4 Na

PAGE 1-B



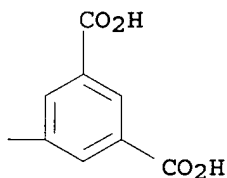
RN 427887-08-9 HCAPLUS
 CN 1,3-Benzenedicarboxylic acid, 5,5'-[(2,5-dimethyl-1,4-piperazinediyl)bis[(1,6-dihydro-6-oxo-1,3,5-triazine-4,2-diyl)imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediyl)azo]]bis-, octasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



● 8 Na

PAGE 1-B



IC ICM C09D011-00
 ICS B41J002-01; B41M005-00; C09B005-14; C09B029-30; C09B031-08;
 C09B033-06; C09B033-10; C09B035-03; C09B062-09
 CC 42-12 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 74
 ST **jet printing ink** butanol feathering
 resistance
 IT Surfactants
 (ink containing; water-thinned **ink-jet**
inks containing isobutanol or tert-butanol for **ink**
 sets and **printing** method)

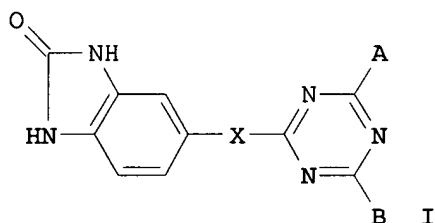
- IT Light-resistant materials
(inks; water-thinned ink-jet
inks containing isobutanol or tert-butanol for ink
sets and printing method)
- IT Inks
(jet-printing, water-thinned; water-thinned
ink-jet inks containing isobutanol or
tert-butanol for ink sets and printing
method)
- IT Inks
(light-resistant; water-thinned ink-jet
inks containing isobutanol or tert-butanol for ink
sets and printing method)
- IT Ink-jet printing
(water-thinned ink-jet inks
containing isobutanol or tert-butanol for ink sets and
printing method)
- IT 106392-12-5, Pluronic L 62
(Pluronic L 64, surfactant, ink containing; water-thinned
ink-jet inks containing isobutanol or
tert-butanol for ink sets and printing
method)
- IT 9014-85-1, Surfynol 465
(Surfynol 485, surfactant, ink containing; water-thinned
ink-jet inks containing isobutanol or
tert-butanol for ink sets and printing
method)
- IT 71002-20-5
(ink containing; water-thinned ink-jet
inks containing isobutanol or tert-butanol for ink
sets and printing method)
- IT 147-14-8D, Copper phthalocyanine, derivs. 1330-38-7,
C.I. Direct Blue 86 2118-39-0 2611-80-5 2945-96-2
4478-76-6 6416-66-6 6846-33-9 6871-98-3 10114-86-0
12222-04-7, C.I. Direct Blue 199 16894-29-4 50925-42-3
52238-69-4 72828-69-4 151151-37-0
160512-93-6 224628-70-0 427887-08-9 664302-39-0
(ink containing; water-thinned ink-jet
inks containing isobutanol or tert-butanol for ink
sets and printing method)
- IT 78-66-0, Surfynol 82
(surfactant, ink containing; water-thinned ink-
jet inks containing isobutanol or tert-butanol
for ink sets and printing method)
- IT 75-65-0, tert-Butanol, uses 78-83-1, Isobutanol, uses
(water-thinned ink-jet inks
containing isobutanol or tert-butanol for ink sets and
printing method)

L62 ANSWER 12 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:443950 HCAPLUS
DOCUMENT NUMBER: 139:23276
TITLE: Pigment dispersants and pigment compositions
containing them
INVENTOR(S): Kamikubo, Takashi; Tanabe, Daisuke
PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
JP 2003165922	A2	20030610	JP 2001-368033	2001 1203
PRIORITY APPLN. INFO.:			JP 2001-368033	2001 1203

OTHER SOURCE(S): MARPAT 139:23276
GI



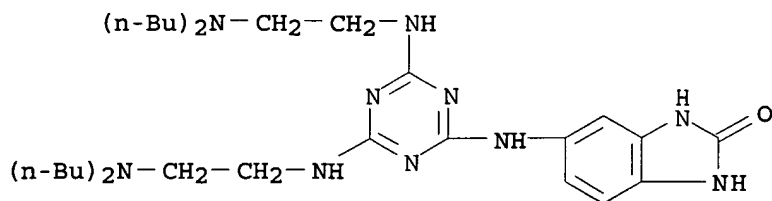
AB Pigment compns. (e.g., coatings and inks) contain pigments and dispersants I [X = NH, O, CONH, SO₂NH, CH₂NH, CH₂NHCOCH₂NH, Y₁Y₂Y₃; Y₁ = CONH, SO₂NH, CH₂NH, NHCO, NHSO₂; Y₂ = (substituted) alkylene, alkenylene, arylene; Y₃ = NH, O; A = amino group; B = OR₁, NHR₁, A, XZ; A, X = same as above; Z = 2-benzimidazol-5-yl; R₁ = H, (substituted) alkyl, alkenyl, aryl]. Thus, 5-amino-2-benzimidazolone, cyanuric chloride, and N,N-dibutylaminoethylamine were refluxed in MeOH for 2 h to give I [X = NH, A = B = NH(CH₂)₂NBu₂] (II). An aminoalkyd resin varnish containing 6% C.I. Pigment Blue 15:1 (phthalocyanine pigment) and 5% (based on pigment) II showed viscosity 550 and 530 cP at 6 and 60 rpm, resp., thixotropic index 1.04, 20° gloss (of baked coating film) 83.2%, no color change, and no bleeding of pigments.

IT 538351-63-2P 538351-64-3P 538351-65-4P
538351-66-5P 538351-67-6P 538351-68-7P
538351-69-8P 538351-70-1P

(preparation of heterocyclic dispersants for pigment compns.)

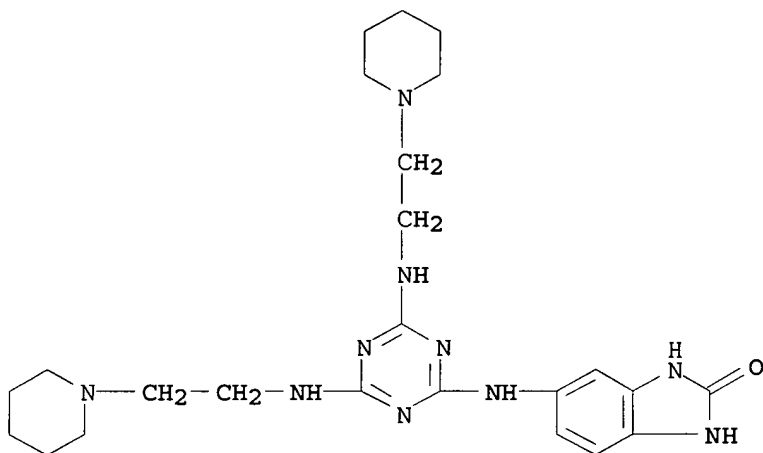
RN 538351-63-2 HCAPLUS

CN 2H-Benzimidazol-2-one, 5-[[4,6-bis[[2-(dibutylamino)ethyl]amino]-1,3,5-triazin-2-yl]amino]-1,3-dihydro- (9CI) (CA INDEX NAME)



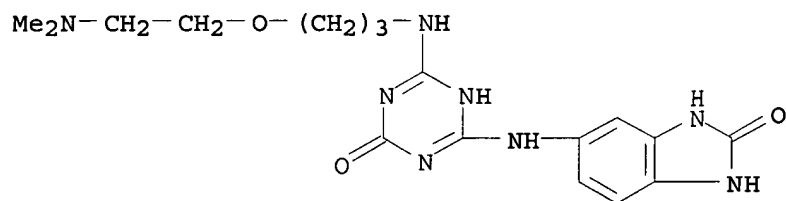
RN 538351-64-3 HCAPLUS

CN 2H-Benzimidazol-2-one, 5-[[4,6-bis[[2-(1-piperidinyl)ethyl]amino]-1,3,5-triazin-2-yl]amino]-1,3-dihydro- (9CI) (CA INDEX NAME)



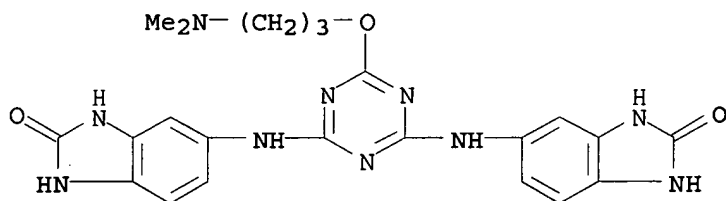
RN 538351-65-4 HCAPLUS

CN 2H-Benzimidazol-2-one, 5-[[6-[[3-[2-(dimethylamino)ethoxy]propyl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]-1,3-dihydro- (9CI) (CA INDEX NAME)



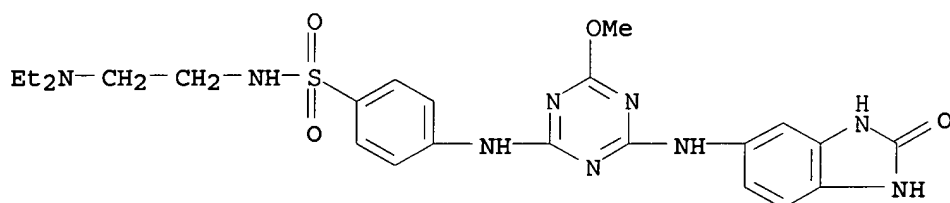
RN 538351-66-5 HCAPLUS

CN 2H-Benzimidazol-2-one, 5,5'-[[6-[3-(dimethylamino)propoxy]-1,3,5-triazine-2,4-diyl]diimino]bis[1,3-dihydro- (9CI) (CA INDEX NAME)



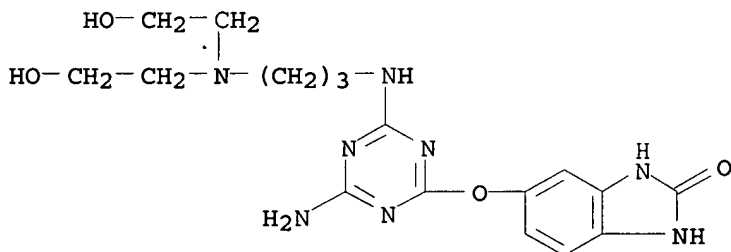
RN 538351-67-6 HCAPLUS

CN Benzenesulfonamide, N-[2-(diethylamino)ethyl]-4-[[4-[(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)amino]-6-methoxy-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



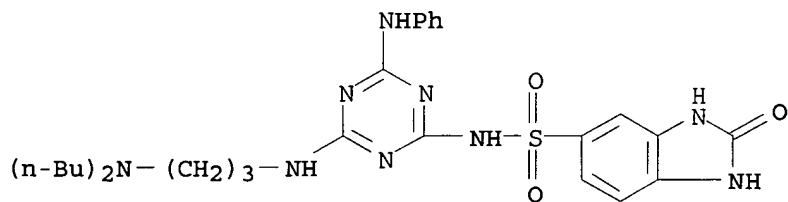
RN 538351-68-7 HCAPLUS

CN 2H-Benzimidazol-2-one, 5-[[4-amino-6-[[3-[bis(2-hydroxyethyl)amino]propyl]amino]-1,3,5-triazin-2-yl]oxy]-1,3-dihydro- (9CI) (CA INDEX NAME)



RN 538351-69-8 HCAPLUS

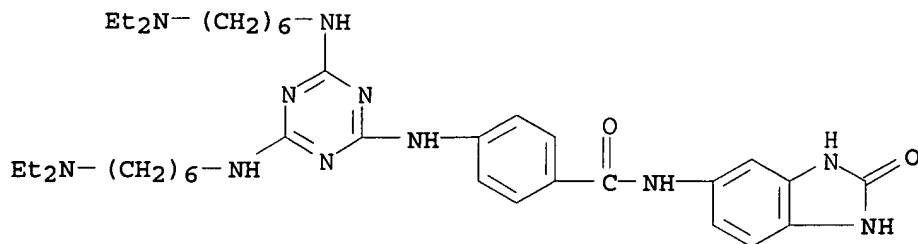
CN 1H-Benzimidazole-5-sulfonamide, N-[4-[[3-(dibutylamino)propyl]amino]-6-(phenylamino)-1,3,5-triazin-2-yl]-2,3-dihydro-2-oxo- (9CI) (CA INDEX NAME)



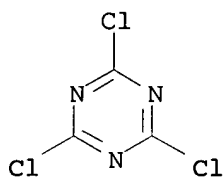
RN 538351-70-1 HCAPLUS

CN Benzamide, 4-[[4,6-bis[[6-(diethylamino)hexyl]amino]-1,3,5-triazin-2-yl]amino]-N-(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)- (9CI) (CA

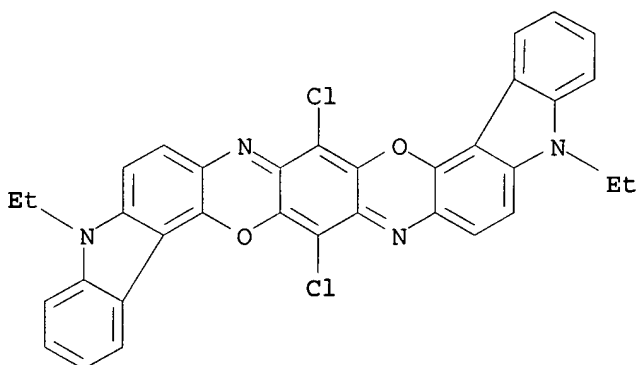
INDEX NAME)



IT 108-77-0, Cyanuric chloride
 (preparation of heterocyclic dispersants for pigment compns.)
 RN 108-77-0 HCAPLUS
 CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)



IT 215247-95-3, C.I. Pigment Violet 23
 (preparation of heterocyclic dispersants for pigment compns.)
 RN 215247-95-3 HCAPLUS
 CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-dihydro- (9CI) (CA INDEX NAME)



IC ICM C09B067-20
 ICS B01F017-32; C09D007-12; C09D011-00; C09D201-00
 CC 42-6 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 28
 ST pigment dispersant triazine benzimidazolone prepn coating;
 ink pigment dispersant benzimidazolone triazine prepn
 IT Alkyd resins
 (amino-containing, coating binder; preparation of heterocyclic
 dispersants for pigment compns.)
 IT Coating materials

Dispersing agents

Inks

Pigments, nonbiological

(preparation of heterocyclic dispersants for pigment compns.)

IT 538351-63-2P 538351-64-3P 538351-65-4P

538351-66-5P 538351-67-6P 538351-68-7P

538351-69-8P 538351-70-1P

(preparation of heterocyclic dispersants for pigment compns.)

IT 95-23-8 108-77-0, Cyanuric chloride 3179-63-3, 3-(

Dimethylamino)propanol 3529-09-7, 2-(

Dibutylamino)ethylamine 27578-60-5, N-

Aminoethylpiperidine 65573-13-9, 3-[2-(

Dimethylamino)ethoxy]propylamine

(preparation of heterocyclic dispersants for pigment compns.)

IT 147-14-8, C.I. Pigment Blue 15:1 980-26-7, C.I. Pigment Red 122

3049-71-6, C.I. Pigment Red 178 4051-63-2, C.I. Pigment Red 177

5468-75-7, C.I. Pigment Yellow 14 14302-13-7, C.I. Pigment Green

36 68134-22-5, C.I. Pigment Yellow 154 84632-65-5, C.I.

Pigment Red 254 215247-95-3, C.I. Pigment Violet 23

(preparation of heterocyclic dispersants for pigment compns.)

L62 ANSWER 13 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:352124 HCAPLUS

DOCUMENT NUMBER: 138:355243

TITLE: Production of sulfonated solid particles and
their use in colored compositionsINVENTOR(S): Nakamura, Michiei; Zama, Yoshiyuki; Okamoto,
Hisao; Nogami, Atsushi; Sakai, Naoyuki; Koiso,
HideyukiPATENT ASSIGNEE(S): Dainichiseika Color & Chemicals Mfg. Co. Ltd.,
Japan

SOURCE: Ger. Offen., 14 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

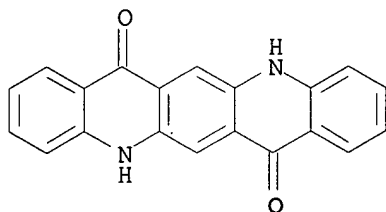
PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
DE 10242875	A1	20030508	DE 2002-10242875	2002 0916
JP 2003165926	A2	20030610	JP 2002-227251	2002 0805
US 2003134938	A1	20030717	US 2002-243660	2002 0916
US 6821334	B2	20041123		
TW 593571	B	20040621	TW 2002-91121279	2002 0917
CN 1417268	A	20030514	CN 2002-154553	2002 0919
PRIORITY APPLN. INFO.:			JP 2001-284955	A 2001 0919

AB A procedure produces sulfonated solid particles such as organic or inorg. pigments by (1) burning sulfur to give SO₂ gas, (2) catalytically oxidizing the product to SO₃ gas, and (3) sulfonating dry powdered pigment material or granular solid particles with the SO₃ in a gas-solid phase reaction. The sulfonated particles have a good combination of stability and water miscibility, improving their suitability for **printing**. In an example, carbon black was sulfonated (3.1%) with SO₃ obtained as described.

IT 1047-16-1DP, C.I. Pigment Violet 19, sulfonated
 4118-16-5DP, C.I. Pigment Yellow 147, sulfonated
 215247-95-3DP, C.I. Pigment Violet 23, sulfonated
 (production of sulfonated solid particles and their use in colored compns.)

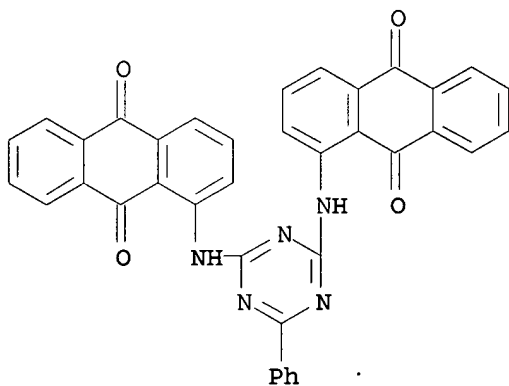
RN 1047-16-1 HCAPLUS

CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
 (CA INDEX NAME)



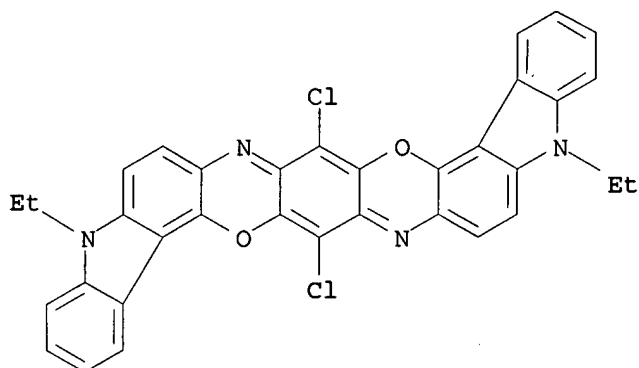
RN 4118-16-5 HCAPLUS

CN 9,10-Anthracenedione, 1,1'-[(6-phenyl-1,3,5-triazine-2,4-diyl)diimino]bis- (9CI) (CA INDEX NAME)



RN 215247-95-3 HCAPLUS

CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-dihydro- (9CI) (CA INDEX NAME)



IC ICM C09B067-16
 ICS C09B067-08; C09B069-02; C09D011-16; C07B045-02
 CC 42-6 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 41, 49
 IT 147-14-8DP, C.I. Pigment Blue 15:3, sulfonated 980-26-7DP, C.I. Pigment Red 122, sulfonated 1047-16-1DP, C.I. Pigment Violet 19, sulfonated 4051-63-2DP, C.I. Pigment Red 177, sulfonated 4118-16-5DP, C.I. Pigment Yellow 147, sulfonated 51016-63-8DP, C.I. Pigment Yellow 173, sulfonated 54660-00-3DP, C.I. Pigment Red 255, sulfonated 84632-65-5DP, C.I. Pigment Red 254, sulfonated 205531-45-9DP, Acrylonitrile-divinylbenzene-2-hydroxyethyl methacrylate-styrene copolymer, sulfonated 215247-95-3DP, C.I. Pigment Violet 23, sulfonated
 (production of sulfonated solid particles and their use in colored compns.)

L62 ANSWER 14 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:827559 HCAPLUS
 DOCUMENT NUMBER: 137:326558
 TITLE: Surface-modified pigments and waterborne paints/inks therefrom showing stable dispersibility
 INVENTOR(S): Kaneda, Jun; Suzuki, Eriko; Iguchi, Tsukasa; Uemura, Toshifumi
 PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002317126	A2	20021031	JP 2001-121979	2001 0420
PRIORITY APPLN. INFO.:				2001 0420
				2001 0420

AB The pigments have, on the surfaces, mixts. comprising (A)

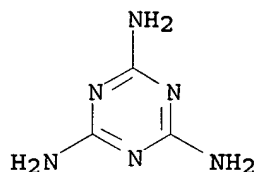
water-insol. compds. of acidic group-bearing dyes and (B) components of organic pigments, which are precipitated out from strong acid solns. Thus, C.I. Pigment Yellow 180 (I) was sulfonated with sulfuric acid to give a mixture of sulfonated I/unreacted I, which were mixed with I and triethanolamine to give surface-modified pigments. An aqueous paint containing the pigments, acrylic acid-dimethylaminoethyl methacrylate-Et acrylate-Me methacrylate-vinyl acetate copolymer, and Cymel 303 (methylated melamine resin) showed good viscosity and gave a glossy coating layer on a PET film.

IT 9003-08-1, Melamine resin
(paint varnishes; surface-modified pigments for aqueous paints/inks showing stable dispersibility)
RN 9003-08-1 HCAPLUS
CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI)
(CA INDEX NAME)

CM 1

CRN 108-78-1

CMF C3 H6 N6



CM 2

CRN 50-00-0

CMF C H2 O

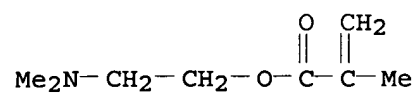


IT 473711-19-2P
(paints; surface-modified pigments for aqueous paints/inks showing stable dispersibility)
RN 473711-19-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with ethenyl acetate, ethyl 2-propenoate, formaldehyde, methyl 2-methyl-2-propenoate, 2-propenoic acid and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

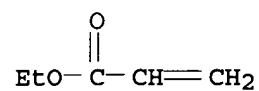
CMF C8 H15 N O2



CM 2

CRN 140-88-5

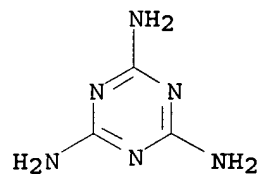
CMF C5 H8 O2



CM 3

CRN 108-78-1

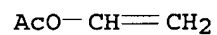
CMF C3 H6 N6



CM 4

CRN 108-05-4

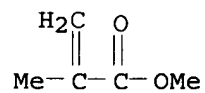
CMF C4 H6 O2



CM 5

CRN 80-62-6

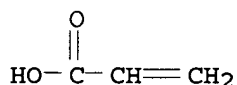
CMF C5 H8 O2



CM 6

CRN 79-10-7

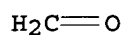
CMF C3 H4 O2



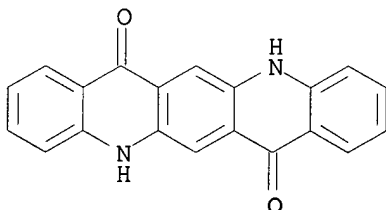
CM 7

CRN 50-00-0

CMF C H2 O



- IT 1047-16-1DP, C.I. Pigment Violet 19, reaction products with chloroacetamide, paraformaldehyde, and 4-aminobenzoic acid, ammonium sodium salt (surface modifiers/dispersants; surface-modified **pigments for aqueous paints/inks** showing stable dispersibility)
- RN 1047-16-1 HCAPLUS
- CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI) (CA INDEX NAME)



- IC ICM C09B067-08
ICS C09B067-14; C09B067-46
- CC 41-8 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 42
- ST surface modified pigment stable dispersibility paint coating; sulfonated dye pigment acrylic melamine waterborne paint; **water thinned ink pigment acid** modified dispersibility
- IT **Aminoplasts**
(acrylic, paints; surface-modified **pigments for aqueous paints/inks** showing stable dispersibility)
- IT Dyes
(heterocyclic; surface-modified **pigments for aqueous paints/inks** showing stable dispersibility)
- IT Alkyd resins
Aminoplasts
(paint varnishes; surface-modified **pigments for aqueous paints/inks** showing stable dispersibility)

- IT Azo dyes
Cyanine dyes
(surface-modified **pigments** for **aqueous** paints/
inks showing stable dispersibility)
- IT Pigments, nonbiological
(surface-modified; surface-modified **pigments** for
aqueous paints/**inks** showing stable
dispersibility)
- IT **Inks**
Paints
(water-thinned; surface-modified **pigments** for
aqueous paints/**inks** showing stable
dispersibility)
- IT 9003-08-1, Melamine resin
(paint varnishes; surface-modified **pigments** for
aqueous paints/**inks** showing stable
dispersibility)
- IT 473711-19-2P
(paints; surface-modified **pigments** for **aqueous**
paints/**inks** showing stable dispersibility)
- IT 147-14-8, C.I. Pigment Blue 15:3 980-26-7, C.I. Pigment Red 122
77804-81-0, C.I. Pigment Yellow 180
(pigment cores; surface-modified **pigments** for
aqueous paints/**inks** showing stable
dispersibility)
- IT 79-07-2DP, Chloroacetamide, reaction products with C.I. pigment
violet 19, paraformaldehyde, and 4-**aminobenzoic** acid,
ammonium sodium salt 147-14-8DP, C.I. Pigment Blue 15:3,
reaction products with fuming sulfuric acid, sodium salt
150-13-0DP, 4-**Aminobenzoic** acid, reaction products with
C.I. pigment violet 19, chloroacetamide, and paraformaldehyde,
ammonium sodium salt 1047-16-1DP, C.I. Pigment Violet
19, reaction products with chloroacetamide, paraformaldehyde, and
4-**aminobenzoic** acid, ammonium sodium salt 7664-93-9DP,
Sulfuric acid, reaction products with C.I. pigment yellow 180,
triethanolamine salt 8014-95-7DP, Fuming sulfuric acid, reaction
products with C.I. pigment blue 15:3, sodium salt 30525-89-4DP,
Paraformaldehyde, reaction products with C.I. pigment violet 19,
chloroacetamide, and 4-**aminobenzoic** acid, ammonium
sodium salt 51083-28-4P 77804-81-0DP, C.I. Pigment Yellow 180,
reaction products with sulfuric acid, triethanolamine salt
367255-48-9P
(surface modifiers/dispersants; surface-modified
pigments for **aqueous** paints/**inks**
showing stable dispersibility)
- IT 62-53-3, Aniline, reactions 121-57-3, 4-
Aminobenzenesulfonic acid 106971-56-6
(surface-modified **pigments** for **aqueous** paints/
inks showing stable dispersibility)

L62 ANSWER 15 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:688230 HCAPLUS

DOCUMENT NUMBER: 137:218544

TITLE: Waterborne **ink** compositions for
ink-jet printing
devices with freedom from **ink**
droplet agglomeration complication caused by
printing gear-derived metal or metal
corrosion

INVENTOR(S): Arita, Hitoshi; Nagata, Nobutaka; Nagai,

PATENT ASSIGNEE(S): Kiyofumi; Murakami, Kakuji
 SOURCE: Ricoh Co., Ltd., Japan
 Jpn. Kokai Tokkyo Koho, 33 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002256188	A2	20020911	JP 2001-59324	2001 0302

PRIORITY APPLN. INFO.: JP 2001-59324

2001
0302

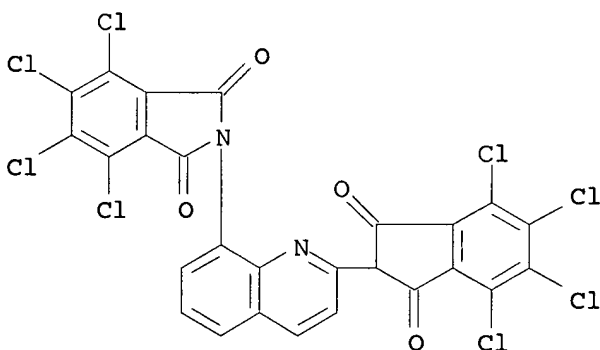
OTHER SOURCE(S): MARPAT 137:218544

AB The **inks** are formulated from **colorants**, additives and **water** as usual and contain organo-sulfonium compds., arsonium compds., B compds., Be²⁺ ions, Al³⁺ ions, Zn²⁺ ions, Ti⁴⁺ ions, Zr⁴⁺ ion or/and Si²⁺ ions for prevention of metal-derived corrosion. Thus, an **ink** containing a black dye 3, glycerin 5, ethylene glycol 20, a polyethylene glycol tridecyl ether acetate 1.0, a mildewcide 0.4, tributylsulfonium hydroxide 1.0 and balance of water to 100% showed good **printing** results when tested with **ink** cartridge having a Si oxide coat film.

IT 30125-47-4, C.I. Pigment Yellow 138 **457647-54-0**
 (dye; waterborne **ink** compns. for **ink-jet printing** devices with freedom from **ink** droplet agglomeration complication caused by **printing** gear-derived metal or metal corrosion)

RN 30125-47-4 HCAPLUS

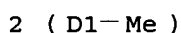
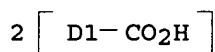
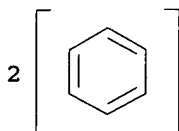
CN 1H-Isoindole-1,3(2H)-dione, 4,5,6,7-tetrachloro-2-[2-(4,5,6,7-tetrachloro-2,3-dihydro-1,3-dioxo-1H-inden-2-yl)-8-quinolinyl]-
 (9CI) (CA INDEX NAME)



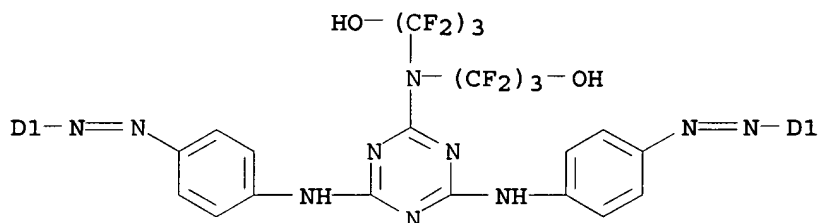
RN 457647-54-0 HCAPLUS

CN Benzoic acid, [[6-[bis(1,1,2,2,3,3-hexafluoro-3-hydroxypropyl)amino]-1,3,5-triazine-2,4-diyl]bis[imino(methyl-4,1-phenylene)azo]]bis- (9CI) (CA INDEX NAME)

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- IC ICM C09D011-00
ICS B41J002-01; B41J002-16; B41M005-00
- CC 42-12 (Coatings, Inks, and Related Products)
- ST **ink jet ink printing head**
preservative sulfonium arsonium compd
- IT **Inks**
(**jet-printing**; waterborne **ink**
compns. for **ink-jet printing**
devices with freedom from **ink** droplet agglomeration
complication caused by **printing** gear-derived metal or
metal corrosion)
- IT Glass, uses
(photosensitive, **printing** parts; waterborne
ink compns. for **ink-jet**
printing devices with freedom from **ink**
droplet agglomeration complication caused by **printing**
gear-derived metal or metal corrosion)
- IT Borosilicate glasses
Polysiloxanes, uses
Soda-lime glasses
(**printing** parts; waterborne **ink** compns. for
ink-jet printing devices with
freedom from **ink** droplet agglomeration complication
caused by **printing** gear-derived metal or metal
corrosion)
- IT Corrosion inhibitors
Ink-jet printers
(waterborne **ink** compns. for **ink-jet**
printing devices with freedom from **ink**

- droplet agglomeration complication caused by **printing** gear-derived metal or metal corrosion)
- IT 163212-10-0D, sulfonated, sulfamide derivative (black dye; waterborne **ink** compns. for **ink-jet printing** devices with freedom from **ink** droplet agglomeration complication caused by **printing** gear-derived metal or metal corrosion)
- IT 17284-74-1P, Dimethylphenylsulfonium hydroxide (corrosion inhibitor; waterborne **ink** compns. for **ink-jet printing** devices with freedom from **ink** droplet agglomeration complication caused by **printing** gear-derived metal or metal corrosion)
- IT 555-75-9, Aluminum ethylate 688-74-4, Tributyl borate 2171-98-4, Zirconium isopropoxide 3087-36-3, Titanium ethylate 7646-85-7, Zinc chloride, uses 13327-32-7, Beryllium hydroxide 17287-05-7, Triethylsulfonium hydroxide 53116-81-7, Tetramethylammonium silicate 134123-39-0, Tributylsulfonium hydroxide 195507-83-6, Tetrabutylarsonium hydroxide (corrosion inhibitor; waterborne **ink** compns. for **ink-jet printing** devices with freedom from **ink** droplet agglomeration complication caused by **printing** gear-derived metal or metal corrosion)
- IT 147-14-8, Copper (II) phthalocyanine 980-26-7, C.I. Pigment Red 122 30125-47-4, C.I. Pigment Yellow 138 112602-73-0 187285-16-1, Pro-Jet Fast Yellow 2 457647-54-0 (dye; waterborne **ink** compns. for **ink-jet printing** devices with freedom from **ink** droplet agglomeration complication caused by **printing** gear-derived metal or metal corrosion)
- IT 7440-21-3, Silicon, uses 7440-67-7, Zirconium, uses 7631-86-9, Silicon oxide, uses 12033-89-5, Silicon nitride, uses 13463-67-7, Titanium oxide, uses 25583-20-4, Titanium nitride (**printing** parts; waterborne **ink** compns. for **ink-jet printing** devices with freedom from **ink** droplet agglomeration complication caused by **printing** gear-derived metal or metal corrosion)
- IT 75-18-3, Dimethyl sulfide 108-90-7, Chlorobenzene, reactions 36552-73-5, Dimethylphenylsulfonium chloride (reactant for sulfonium compound; waterborne **ink** compns. for **ink-jet printing** devices with freedom from **ink** droplet agglomeration complication caused by **printing** gear-derived metal or metal corrosion)

L62 ANSWER 16 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:607759 HCAPLUS

DOCUMENT NUMBER: 137:156231

TITLE: Aqueous **ink-jet**

inks and **printing** method,

units, cartridges, and apparatus therewith

INVENTOR(S): Sato, Shinichi; Takayama, Hideki; Koike, Shoji

PATENT ASSIGNEE(S): Canon Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002226743	A2	20020814	JP 2001-24156	2001 0131
PRIORITY APPLN. INFO.:			JP 2001-24156	2001 0131

AB Title **inks**, resulting **prints** with good fastness on various kinds of paper, contain polymer-coated pigment microcapsules and self-dispersible pigments with surfaces directly or through other group bonded to **hydrophilic** groups. A typical aqueous **ink** contained p-aminobenzoic acid-treated carbon black and microcapsules prepared from aqueous dispersion containing carbon black, dimethylethanolamine, and Bu acrylate-Bu methacrylate-glycidyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid copolymer.

IT 9003-08-1P, Melamine resin
(Super-Beckamine L 109-60, **pigment**-containing microcapsules; **aqueous ink-jet inks** containing **hydrophilic** pigment and microcapsuled pigment blends for fastness on various paper)

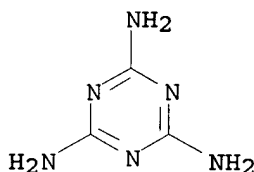
RN 9003-08-1 HCAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI)
(CA INDEX NAME)

CM 1

CRN 108-78-1

CMF C3 H6 N6



CM 2

CRN 50-00-0

CMF C H2 O

H₂C=O

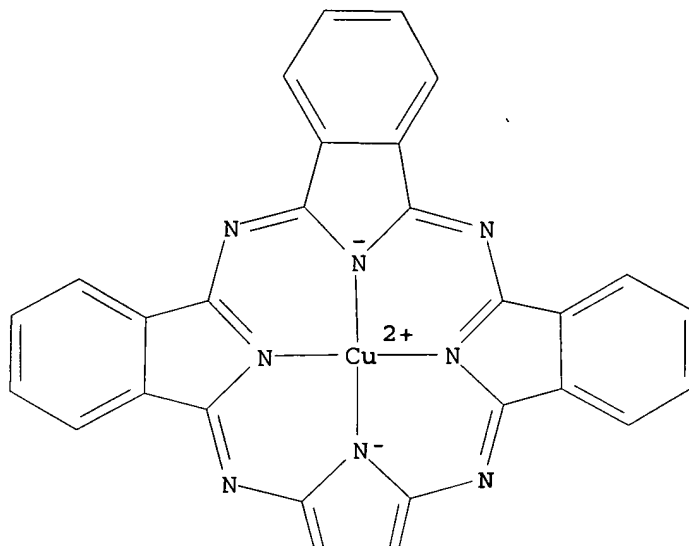
IT 147-14-8, C.I. Pigment blue 15:3
(treated or microcapsulated; aqueous **ink-jet inks** containing **hydrophilic** pigment and microcapsuled pigment blends for fastness on various paper)

RN 147-14-8 HCAPLUS

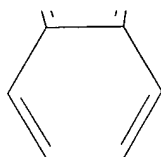
CN Copper, [29H,31H-phthalocyaninato(2-)]-

κN29,κN30,κN31,κN32]-, (SP-4-1) - (9CI)
(CA INDEX NAME)

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IC ICM C09D011-00
ICS B41J002-01; B41M005-00; C09C003-08; C09C003-10
CC 42-12 (Coatings, Inks, and Related Products)
ST fastness **aq ink hydrophilic**
pigment blend microcapsuled colorant
IT Aminoplasts
(Super-Beckamine L 109-60, **pigment**-containing
microcapsules; **aqueous ink-jet**
inks containing **hydrophilic** pigment and
microcapsuled pigment blends for fastness on various paper)
IT Ionomers
(acrylic, **pigment**-containing microcapsules; **aqueous**
ink-jet inks containing
hydrophilic pigment and microcapsuled pigment blends
for fastness on various paper)
IT Microcapsules
Pigments, nonbiological

- (aqueous ink-jet inks containing hydrophilic pigment and microcapsuled pigment blends for fastness on various paper)
- IT Inks (jet-printing; aqueous ink-jet inks containing hydrophilic pigment and microcapsuled pigment blends for fastness on various paper)
- IT Epoxy resins, uses Polyureas (pigment-containing microcapsules; aqueous ink-jet inks containing hydrophilic pigment and microcapsuled pigment blends for fastness on various paper)
- IT Carbon black, uses (treated or microcapsulated; aqueous ink-jet inks containing hydrophilic pigment and microcapsuled pigment blends for fastness on various paper)
- IT 9003-08-1P, Melamine resin (Super-Beckamine L 109-60, pigment-containing microcapsules; aqueous ink-jet inks containing hydrophilic pigment and microcapsuled pigment blends for fastness on various paper)
- IT 79953-85-8, C.I. Pigment yellow 128 (aqueous ink-jet inks containing hydrophilic pigment and microcapsuled pigment blends for fastness on various paper)
- IT 980-26-7, C.I. Pigment red 122 12237-22-8, C.I. Solvent black 27 (microcapsulated; aqueous ink-jet inks containing hydrophilic pigment and microcapsuled pigment blends for fastness on various paper)
- IT 150-13-0, p-Aminobenzoic acid 515-74-2, Sodium p-aminobenzenesulfonate 7681-52-9, Sodium hypochlorite (pigment treating agent; aqueous ink-jet inks containing hydrophilic pigment and microcapsuled pigment blends for fastness on various paper)
- IT 25085-99-8DP, Bisphenol A diglycidyl ether homopolymer, polymers with aliphatic polyamines 119607-20-4P, Diethylenetriamine-Coronate L copolymer 227202-30-4P, Butyl acrylate-butyl methacrylate-glycidyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid copolymer dimethylethanolamine salt 351505-11-8P, Butyl acrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-styrene copolymer diethanolamine salt 444986-66-7P, Butyl acrylate-butyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid copolymer diethanolamine salt 445312-69-6P, Acrylic acid-butyl acrylate-butyl methacrylate-2-hydroxyethyl methacrylate copolymer dimethylethanolamine salt (pigment-containing microcapsules; aqueous ink-jet inks containing hydrophilic pigment and microcapsuled pigment blends for fastness on various paper)
- IT 147-14-8, C.I. Pigment blue 15:3 (treated or microcapsulated; aqueous ink-jet inks containing hydrophilic pigment and microcapsuled pigment blends for fastness on various paper)

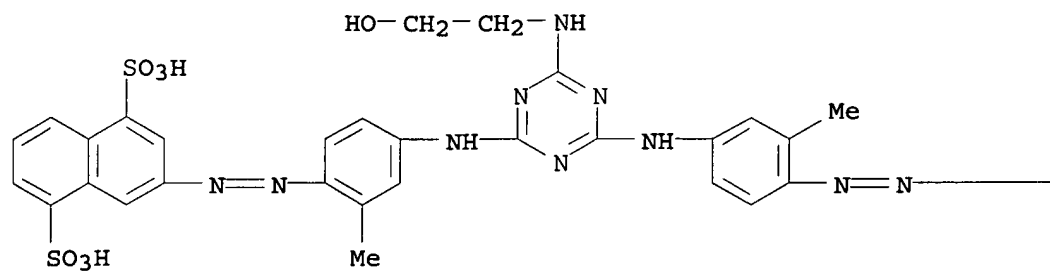
L62 ANSWER 17 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:606493 HCAPLUS
 DOCUMENT NUMBER: 137:141979
 TITLE: Aqueous ink-jet

ink sets and printing
 method, units, cartridges, and apparatus
 therewith
 INVENTOR(S): Takayama, Hideki; Sato, Shinichi; Koike, Shoji
 PATENT ASSIGNEE(S): Canon Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002226742	A2	20020814	JP 2001-23699	2001 0131
PRIORITY APPLN. INFO.: JP 2001-23699				2001 0131

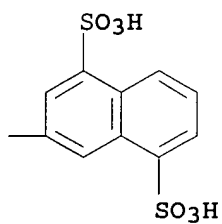
AB Title **ink sets**, resulting **prints** with light
 and O3 resistance, contain at least one kind of colored
ink consisting of ≥ 2 different color concentration
inks in which the high color concentration one contains dyes and
 the low color concentration one contains self-dispersible pigments with
 surfaces directly or through other group bonded to
hydrophilic groups. A typical **ink set** consisted
 of a 3% p-aminobenzoic acid-treated carbon black-containing aqueous
ink, a 0.6% Na p-aminobenzenesulfonate (I)-treated C.I.
 pigment blue 15:3-containing aqueous cyan **ink**, a 0.8% I-treated
 C.I. pigment red 122-containing aqueous magenta **ink**, a 1.5% C.I.
 direct yellow 86-containing aqueous **ink**, a 2.5% C.I. acid red
 289-containing aqueous **ink**, and a 3.5% C.I. direct blue
 199-containing aqueous **ink**.
 IT 50925-42-3, C.I. Direct yellow 86
 (aqueous **ink-jet ink sets** containing high
 dye-containing and low **hydrophilic** pigment-containing same
 colored **inks** for light and O3 resistance)
 RN 50925-42-3 HCAPLUS
 CN 1,5-Naphthalenedisulfonic acid, 3,3'-[[6-[(2-hydroxyethyl) amino]-
 1,3,5-triazine-2,4-diyl]bis[imino(2-methyl-4,1-phenylene)azo]]bis-
 , tetrasodium salt (9CI) (CA INDEX NAME)

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●4 Na

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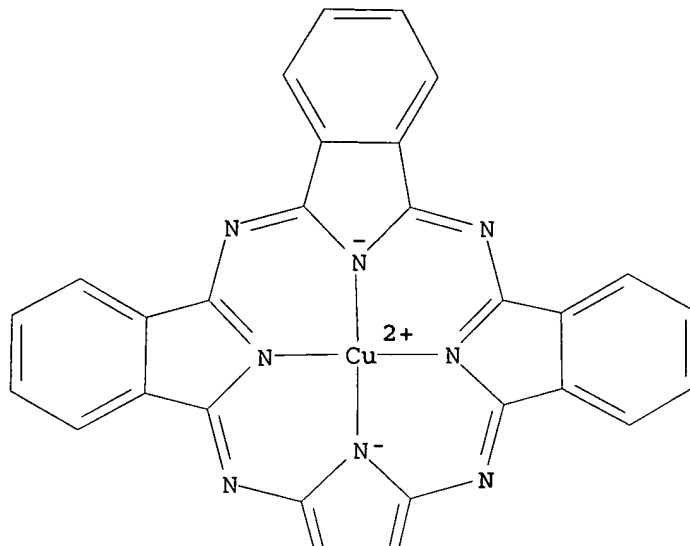


IT 147-14-8, C.I. Pigment blue 15:3
 (treated; aqueous ink-jet ink sets
 containing high dye-containing and low hydrophilic
 pigment-containing same colored inks for light and O3
 resistance)

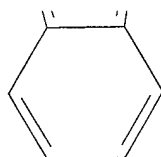
RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-
 κ N29, κ N30, κ N31, κ N32]-, (SP-4-1)- (9CI)
 (CA INDEX NAME)

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IC ICM C09D011-00
 ICS B41J002-01; B41M005-00
 CC 42-12 (Coatings, Inks, and Related Products)
 ST high dye low **hydrophilic pigment** concn
 aq ink; light ozone resistance aq ink
 set **jet printing**
 IT Dyes
 Pigments, nonbiological
 (aqueous ink-jet ink sets
 containing high dye-containing and low **hydrophilic**
 pigment-containing same colored **inks** for light and O3
 resistance)
 IT **Inks**
 (jet-printing; aqueous ink-
 jet ink sets containing high dye-containing and low
 hydrophilic pigment-containing same colored **inks**
 for light and O3 resistance)
 IT Carbon black, uses
 (treated; aqueous ink-jet ink sets
 containing high dye-containing and low **hydrophilic**

pigment-containing same colored **inks** for light and O3 resistance)

IT 12220-28-9, C.I. Acid red 289 12222-04-7, C.I. Direct blue 199
50925-42-3, C.I. Direct yellow 86
 (aqueous **ink-jet ink** sets containing high dye-containing and low **hydrophilic** pigment-containing same colored **inks** for light and O3 resistance)

IT 150-13-0, p-Aminobenzoic acid
 (carbon black treated with; aqueous **ink-jet ink** sets containing high dye-containing and low **hydrophilic** pigment-containing same colored **inks** for light and O3 resistance)

IT 1047-16-1, C.I. Pigment violet 19
 (carboxylated; aqueous **ink-jet ink** sets containing high dye-containing and low **hydrophilic** pigment-containing same colored **inks** for light and O3 resistance)

IT 515-74-2, Sodium p-aminobenzenesulfonate
 (cyan and magenta **pigments** treated with; **aq . ink-jet ink** sets containing high dye-containing and low **hydrophilic** pigment-containing same colored **inks** for light and O3 resistance)

IT 7681-52-9, Sodium hypochlorite
 (**pigments** treated with; aqueous **ink-jet ink** sets containing high dye-containing and low **hydrophilic** pigment-containing same colored **inks** for light and O3 resistance)

IT 147-14-8, C.I. Pigment blue 15:3 980-26-7, C.I. Pigment red 122
 (treated; aqueous **ink-jet ink** sets containing high dye-containing and low **hydrophilic** pigment-containing same colored **inks** for light and O3 resistance)

L62 ANSWER 18 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:538303 HCAPLUS
 DOCUMENT NUMBER: 137:95269
 TITLE: Pigment compositions and their dispersions with good fluidity and dispersibility
 INVENTOR(S): Sawamura, Katsuhiko; Chosokabe, Hiroshi; Uraki, Hisashi; Nogami, Takayuki
 PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002201378	A2	20020719	JP 2000-400537	2000 1228
PRIORITY APPLN. INFO.:			JP 2000-400537	2000 1228

AB The compns., useful for offset **inks**, gravure

inks, coatings, etc., comprise ≥ 1 basic group-containing compound chosen from pigment derivs., anthraquinone derivs., and triazine derivs., phosphoric acid group-containing polymers, and pigments. Thus, a coating composition containing Pigment Blue 15:3 9, CuPcSO₂NH(CH₂)₃NMe₂ (CuPc = Cu phthalocyanine residue) 1, acidophosphoxyethyl methacrylate-Bu methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-Me methacrylate copolymer 2, alkyd resin 28, melamine resin 10, thinner 50% showed viscosity at 6 rpm and 60 rpm 900 and 720 cP, resp., and TI value 1.25.

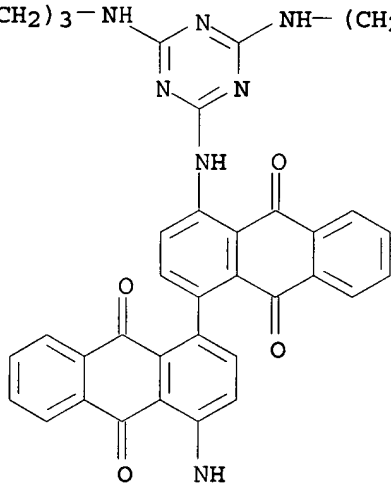
IT 178481-37-3 185342-91-0 442526-48-9
442637-92-5

(dispersant; pigment compns. with good fluidity and dispersibility)

RN 178481-37-3 HCAPLUS

CN [1,1'-Bianthracene]-9,9',10,10'-tetrone, 4,4'-bis[[4,6-bis[[3-(dimethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

Me₂N-(CH₂)₃-NH

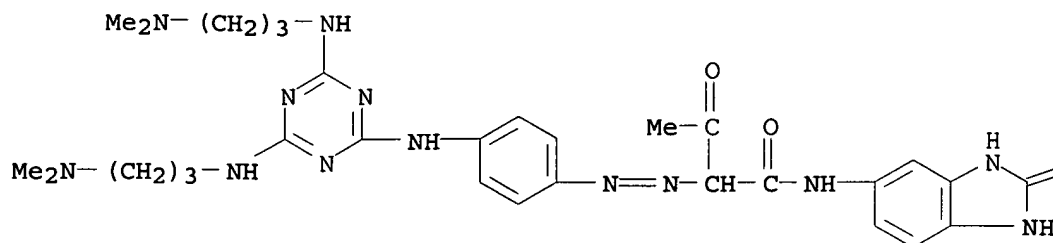


Me₂N-(CH₂)₃-NH

RN 185342-91-0 HCAPLUS

CN Butanamide, 2-[[4-[[4,6-bis[[3-(dimethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]azo]-N-(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)-3-oxo- (9CI) (CA INDEX NAME)

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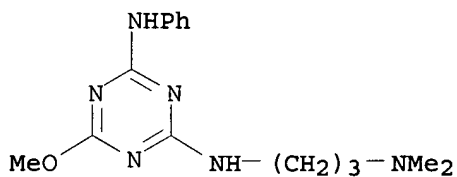


PAGE 1-B

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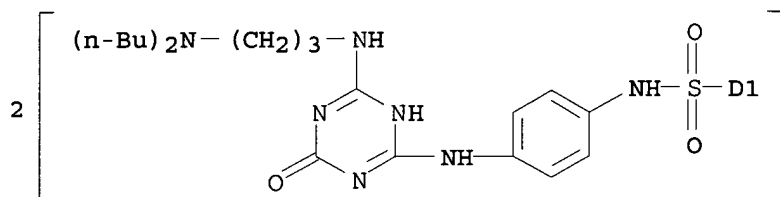
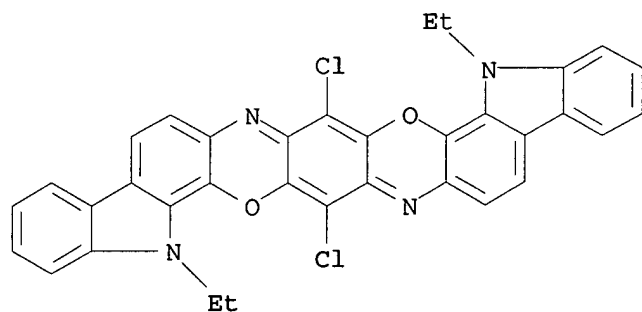
RN 442526-48-9 HCAPLUS

CN 1,3,5-Triazine-2,4-diamine, N-[3-(dimethylamino)propyl]-6-methoxy-N'-phenyl- (9CI) (CA INDEX NAME)

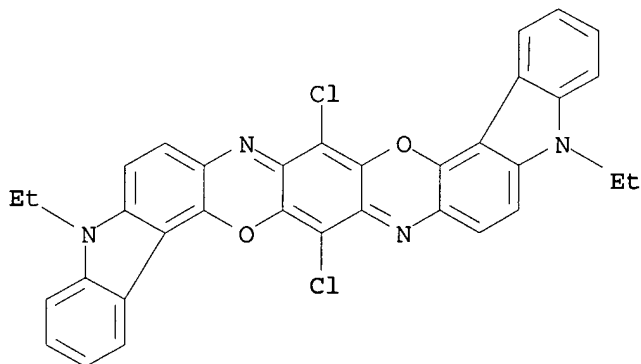


RN 442637-92-5 HCAPLUS

CN Diindolo[3,2-c:3',2'-n]triphenodioxazinedisulfonamide, 8,18-dichloro-N,N'-bis[4-[[6-[[3-(dibutylamino)propyl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]phenyl]-10,20-diethyl-10,20-dihydro- (9CI) (CA INDEX NAME)



IT 215247-95-3, Pigment Violet 23
 (pigment comps. with good fluidity and dispersibility)
 RN 215247-95-3 HCAPLUS
 CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-
 diethyl-5,15-dihydro- (9CI) (CA INDEX NAME)

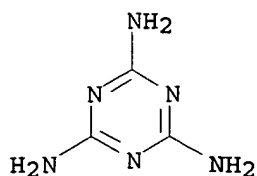


IT 9003-08-1, Melamine resin
 (pigment comps. with good fluidity and dispersibility)
 RN 9003-08-1 HCAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI)
 (CA INDEX NAME)

CM 1

CRN 108-78-1

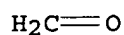
CMF C3 H6 N6



CM 2

CRN 50-00-0

CMF C H2 O



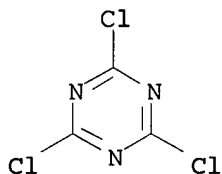
IT 108-77-0, Cyanuric chloride 83372-61-6

186511-07-9

(preparation of pigment dispersants for pigment compns. with good fluidity)

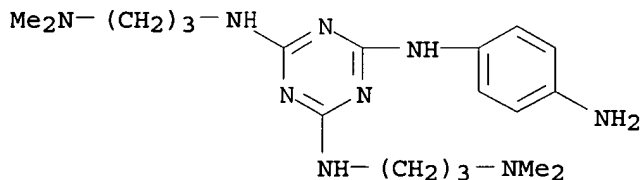
RN 108-77-0 HCAPLUS

CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)



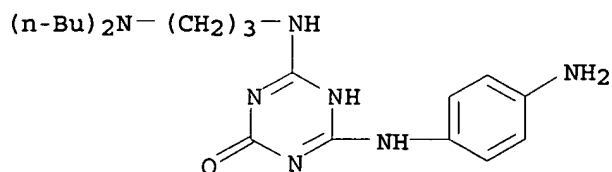
RN 83372-61-6 HCAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, N-(4-aminophenyl)-N',N''-bis[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)



RN 186511-07-9 HCAPLUS

CN 1,3,5-Triazin-2(1H)-one, 4-[(4-aminophenyl)amino]-6-[[3-(dimethylamino)propyl]amino]- (9CI) (CA INDEX NAME)



IC ICM C09B067-46
ICS C09B001-00; C09B001-467; C09B017-00; C09B029-20; C09B029-33;
C09B035-035; C09B035-10; C09B047-16; C09B047-24; C09B048-00;
C09B057-00; C09B067-20; C09D011-00; C09D201-00

CC 42-6 (**Coatings, Inks, and Related Products**)
Section cross-reference(s): 28, 41

ST pigment offset gravure ink coating phosphoric polymer;
dispersant pigment anthraquinone triazine alkyd melamine resin;
methylaminopropylamine sulfone copper phthalocyanine
dispersant; acidophosphoxyethyl butyl methacrylate hydroxyethyl
methyl polymer

IT **Inks**
(gravure; pigment compns. with good fluidity and
dispersibility)

IT **Inks**
(lithog.; pigment compns. with good fluidity and
dispersibility)

IT Alkyd resins
Aminoplasts
(pigment compns. with good fluidity and dispersibility)

IT 68324-29-8 **178481-37-3 185342-91-0**
442526-45-6 442526-46-7 442526-47-8 **442526-48-9**
442532-86-7 442532-87-8 442532-88-9 **442637-92-5**
(dispersant; pigment compns. with good fluidity and
dispersibility)

IT 147-14-8, Pigment Blue 15:3 4051-63-2, Pigment Red 177
215247-95-3, Pigment Violet 23
(pigment compns. with good fluidity and dispersibility)

IT **9003-08-1**, Melamine resin
(pigment compns. with good fluidity and dispersibility)

IT 62-53-3, Aniline, reactions 100-01-6, p-Nitroaniline, reactions
104-78-9 **108-77-0**, Cyanuric chloride 109-01-3,
N-Methylpiperazine 109-55-7 111-92-2, Dibutylamine 123-00-2,
4-Morpholinepropanamine 1331-47-1, Dichlorobenzidine
3731-38-2, Quinuclidone 6470-87-7 26576-46-5, 5-
Acetoacetylaminobenzimidazolone 27741-88-4 54660-00-3
83372-61-6 186511-07-9 442526-49-0
(preparation of pigment dispersants for pigment compns. with good
fluidity)

L62 ANSWER 19 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:538302 HCAPLUS
DOCUMENT NUMBER: 137:95268
TITLE: Pigment compositions and their dispersions
with good fluidity and dispersibility
INVENTOR(S): Sawamura, Katsuhiko; Chosokabe, Hiroshi;
Uraki, Hisashi; Nogami, Takayuki
PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002201377	A2	20020719	JP 2000-400536	2000 1228
PRIORITY APPLN. INFO.:			JP 2000-400536	2000 1228

AB The compns., useful for offset **inks**, gravure **inks**, coatings, etc., comprise ≥ 1 basic group-containing compound chosen from pigment derivs., anthraquinone derivs., and triazine derivs., sulfonic acid group-containing polymers, and pigments. Thus, a coating composition containing Pigment Blue 15:3 9, CuPcSO₂NH(CH₂)₃NMe₂ (CuPc = Cu phthalocyanine residue) 1, 2-acrylamido-2-methylpropanesulfonic acid-Bu methacrylate-2-hydroxyethyl methacrylate-Me methacrylate copolymer 2, alkyd resin 28, melamine resin 10, thinner 50% showed viscosity at 6 rpm and 60 rpm 850 and 730 cP, resp., and TI value 1.16.

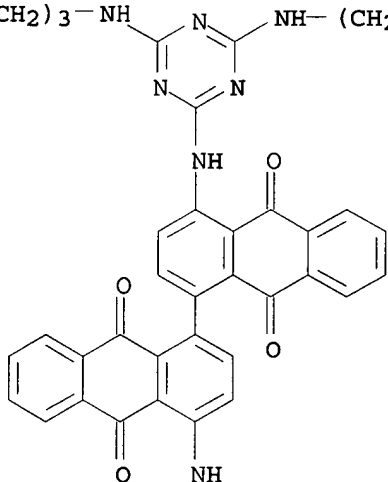
IT 178481-37-3 185342-91-0 442526-48-9
 442637-92-5

(dispersant; pigment compns. with good fluidity and dispersibility)

RN 178481-37-3 HCAPLUS

CN [1,1'-Bianthracene]-9,9',10,10'-tetrone, 4,4'-bis[[4,6-bis[[3-(dimethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

Me₂N-(CH₂)₃-NH

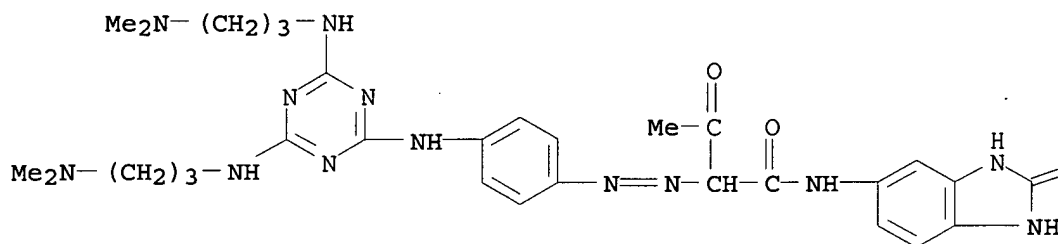


Me₂N-(CH₂)₃-NH

RN 185342-91-0 HCAPLUS

CN Butanamide, 2-[[4-[[4,6-bis[[3-(dimethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]azo]-N-(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)-3-oxo- (9CI) (CA INDEX NAME)

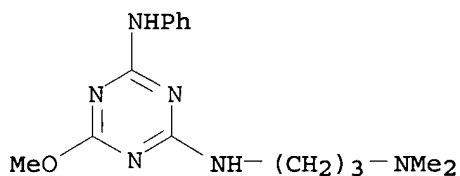
PAGE 1-A



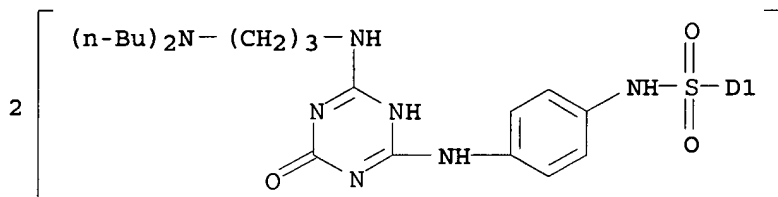
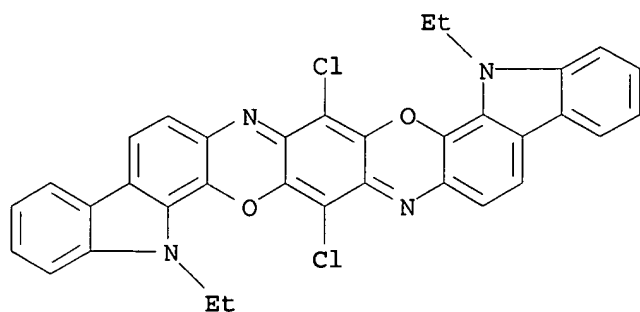
PAGE 1-B

=O

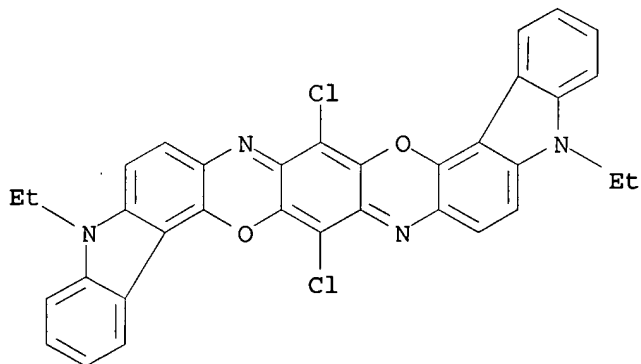
RN 442526-48-9 HCAPLUS
 CN 1,3,5-Triazine-2,4-diamine, N-[3-(dimethylamino)propyl]-6-methoxy-N'-phenyl- (9CI) (CA INDEX NAME)



RN 442637-92-5 HCAPLUS
 CN Diindolo[3,2-c:3',2'-n]triphenodioxazinedisulfonamide, 8,18-dichloro-N,N'-bis[4-[[6-[[3-(dibutylamino)propyl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]phenyl]-10,20-diethyl-10,20-dihydro- (9CI) (CA INDEX NAME)



IT 215247-95-3, Pigment Violet 23
 (pigment comps. with good fluidity and dispersibility)
 RN 215247-95-3 HCAPLUS
 CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-
 diethyl-5,15-dihydro- (9CI) (CA INDEX NAME)

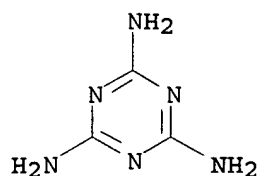


IT 9003-08-1, Melamine resin
 (pigment comps. with good fluidity and dispersibility)
 RN 9003-08-1 HCAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI)
 (CA INDEX NAME)

CM 1

CRN 108-78-1

CMF C3 H6 N6



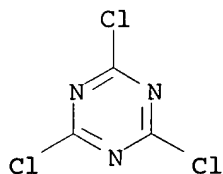
CM 2

CRN 50-00-0

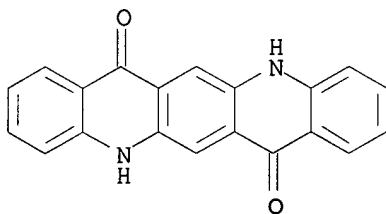
CMF C H2 O

 $\text{H}_2\text{C}=\text{O}$

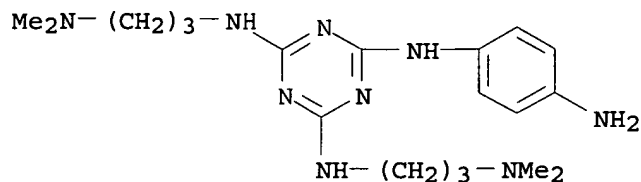
IT 108-77-0, Cyanuric chloride 1047-16-1,
 Quinacridone 83372-61-6 186511-07-9
 (preparation of pigment dispersants for pigment compns. with good
 fluidity)
 RN 108-77-0 HCAPLUS
 CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)



RN 1047-16-1 HCAPLUS
 CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
 (CA INDEX NAME)

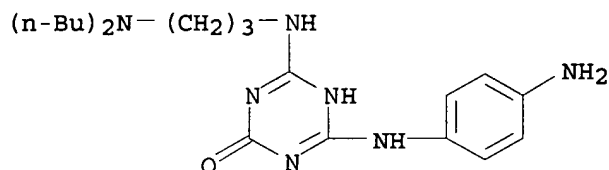


RN 83372-61-6 HCAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, N-(4-aminophenyl)-N',N''-bis[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)



RN 186511-07-9 HCAPLUS

CN 1,3,5-Triazin-2(1H)-one, 4-[[4-aminophenyl]amino]-6-[[3-(dimethylamino)propyl]amino]- (9CI) (CA INDEX NAME)



IC ICM C09B067-46

ICS C09B001-00; C09B001-467; C09B017-00; C09B029-20; C09B029-33; C09B035-035; C09B035-10; C09B047-16; C09B047-24; C09B048-00; C09B057-00; C09B067-20; C09C003-08; C09C003-10; C09D011-00; C09D201-00

CC 42-6 (Coatings, Inks, and Related Products)

Section cross-reference(s): 28, 41

ST pigment offset gravure ink coating sulfonic polymer; dispersant pigment anthraquinone triazine alkyd melamine resin; methylaminopropylamine sulfone copper phthalocyanine dispersant; acrylamidomethylpropanesulfonic acid butyl methacrylate hydroxyethyl methyl polymer

IT Inks

(gravure; pigment compns. with good fluidity and dispersibility)

IT Inks

(lithog.; pigment compns. with good fluidity and dispersibility)

IT Alkyd resins

Aminoplasts

(pigment compns. with good fluidity and dispersibility)

IT 68324-29-8 178481-37-3 185342-91-0

442526-45-6 442526-46-7 442526-47-8 442526-48-9

442532-86-7 442532-87-8 442532-88-9 442637-92-5

(dispersant; pigment compns. with good fluidity and dispersibility)

IT 147-14-8, Pigment Blue 15:3 4051-63-2, Pigment Red 177

215247-95-3, Pigment Violet 23

(pigment compns. with good fluidity and dispersibility)

IT 9003-08-1, Melamine resin

(pigment compns. with good fluidity and dispersibility)

IT 62-53-3, Aniline, reactions 100-01-6, p-Nitroaniline, reactions

104-78-9 108-77-0, Cyanuric chloride 109-01-3,

N-Methylpiperazine 109-55-7 111-92-2, Dibutylamine 123-00-2,

4-Morpholinepropanamine 1047-16-1, Quinacridone

1331-47-1, Dichlorobenzidine 6470-87-7 26576-46-5, 5-

Acetoacetylaminobenzimidazolone 27741-88-4 54660-00-3

83372-61-6 186511-07-9 442526-49-0

(preparation of pigment dispersants for pigment compns. with good fluidity)

L62 ANSWER 20 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:522304 HCAPLUS

DOCUMENT NUMBER: 137:80333

TITLE: Manufacturing pigment dispersed liquid and
ink for ink-jet
printer recording using pigment
dispersed liquid

INVENTOR(S): Komatsu, Hidehiko; Hara, Kazuhiko; Ota,
Hitoshi; Hayashi, Hiroko

PATENT ASSIGNEE(S): Seiko Epson Corporation, Japan

SOURCE: U.S. Pat. Appl. Publ., 28 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2002088375	A1	20020711	US 2001-895005	2001 0628
US 6599356	B2	20030729		
JP 2002327144	A2	20021115	JP 2001-197156	2001 0628
PRIORITY APPLN. INFO.:			JP 2000-195011	A 2000 0628
			JP 2001-54602	A 2001 0228

AB The title liquid is made by step A of introducing a hydrophilic dispersibility-imparting group directly and/or via another atomic group to the surface of pigment particles; step B of dispersing the pigment obtained in Step A in an aqueous medium; and step C of conducting refining treatment of the dispersed liquid obtained in Step B.

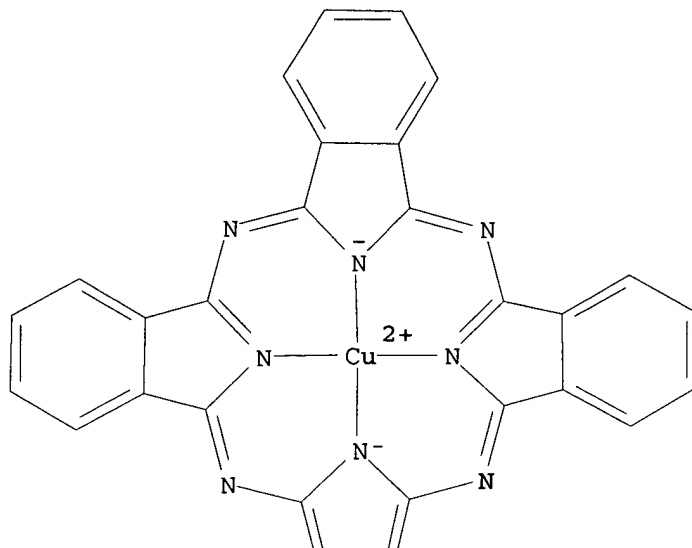
IT 147-14-8, C.I. Pigment Blue 15:3 4118-16-5, C.I.
Pigment Yellow 147

(filtration of pigment dispersed liquid for storage-stable
anticlogging ink for ink-jet
printer recording)

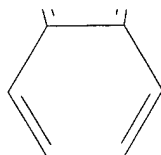
RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-
κN29,κN30,κN31,κN32]-, (SP-4-1)- (9CI)
(CA INDEX NAME)

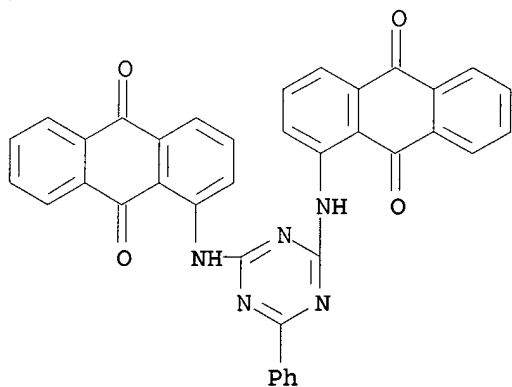
PAGE 1-A



PAGE 2-A



RN 4118-16-5 HCAPLUS
CN 9,10-Anthracenedione, 1,1'-[(6-phenyl-1,3,5-triazine-2,4-diyl)diimino]bis- (9CI) (CA INDEX NAME)



IC ICM C09C001-44
ICS C09D011-00; C08K005-00; C09B027-00
INCL 106472000
CC 42-6 (Coatings, Inks, and Related Products)
ST storage stable **jet ink printing** self
dispersing pigment; sulfonate carbon black dispersion
ultrafiltration **jet ink**
IT Pigments, nonbiological
(filtration of pigment dispersed liquid for storage-stable
anticlogging **ink for ink-jet**
printer recording)
IT Carbon black, uses
(filtration of pigment dispersed liquid for storage-stable
anticlogging **ink for ink-jet**
printer recording)
IT **Inks**
(**jet-printing**, conductive; manufacturing pigment
dispersed liquid for storage-stable anticlogging **ink**
for **ink-jet printer** recording)
IT Ultrafiltration
(of pigment dispersed liquid for storage-stable anticlogging
ink for ink-jet printer
recording)
IT Polyoxyalkylenes, uses
(surface treating agent; filtration of pigment dispersed liquid
for storage-stable anticlogging **ink for ink**
-jet printer recording)
IT 147-14-8, C.I. Pigment Blue 15:3 1047-16-1, C.I. Pigment
Violet 19 1328-53-6, C.I. Pigment Green 7 3573-01-1, C.I.
Pigment Red 209 4118-16-5, C.I. Pigment Yellow 147
4948-15-6, C.I. Pigment Red 149 5045-40-9, C.I. Pigment Yellow
109 5590-18-1, C.I. Pigment Yellow 110 12236-62-3, C.I.
Pigment Orange 36 30125-47-4, C.I. Pigment Yellow 138
72828-00-3, C.I. Pigment Brown 32 77804-81-0, C.I. Pigment
Yellow 180 79953-85-8, C.I. Pigment Yellow 128
(filtration of pigment dispersed liquid for storage-stable
anticlogging **ink for ink-jet**
printer recording)
IT 110-86-1D, Pyridine, sulfonated 121-57-3, p-Aminobenzenesulfonic
acid 126-33-0, Sulfolane 7446-11-9, Sulfur trioxide, uses
25322-68-3, Polyethylene glycol
(surface treating agent; filtration of pigment dispersed liquid
for storage-stable anticlogging **ink for ink**
-jet printer recording)

L62 ANSWER 21 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:98725 HCAPLUS
DOCUMENT NUMBER: 136:152024
TITLE: Light-resistant fluorescent colorants having
good compatibility with resins
INVENTOR(S): Tamano, Michiko
PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

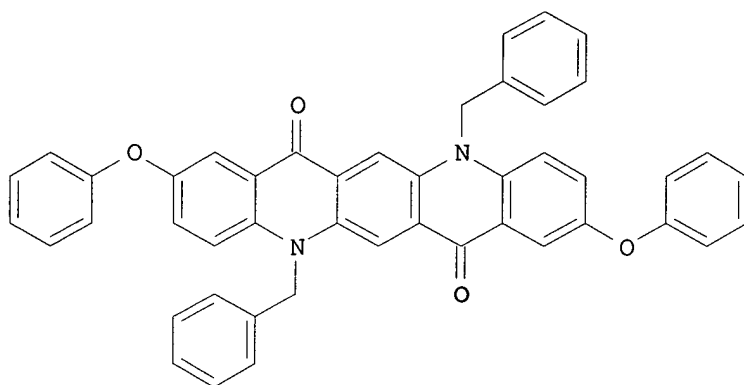
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002038044	A2	20020206	JP 2000-230268	2000 0731

PRIORITY APPLN. INFO.:

JP 2000-230268

2000
0731OTHER SOURCE(S):
GI

MARPAT 136:152024



I

AB The colorants A(B)n (A = fused polycyclic organic group; B = C4-50 organic group; n = 1-8) are useful for resin moldings, coatings, and inks. Thus, a composition containing 100 parts HDPE (Hizex 2208) and 4 parts a masterbatch containing polyethylene 30, (I) 30, and polyethylene wax 40 parts was extruded to give a molding showing no discoloration after 48 h weatherometer exposure.

IT 9003-08-1, Melamine resin
(light-resistant fluorescent colorants having good compatibility with resins)

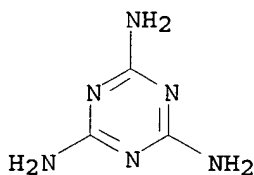
RN 9003-08-1 HCAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI)
(CA INDEX NAME)

CM 1

CRN 108-78-1

CMF C3 H6 N6

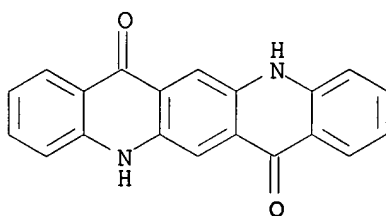


CM 2

CRN 50-00-0
CMF C H2 O

H₂C=O

IT 1047-16-1, Quinacridone
(light-resistant fluorescent colorants having good
compatibility with resins)
RN 1047-16-1 HCAPLUS
CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
(CA INDEX NAME)



IC ICM C09B048-00
ICS C09B005-62; C09D011-00; C09K011-06
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 41, 42
ST HDPE molding fluorescent colorant light resistance; plastic
molding fluorescent colorant light resistance; **ink**
fluorescent colorant light resistance; coating fluorescent
colorant light resistance
IT Coating materials
Inks
(fluorescent; light-resistant fluorescent colorants having good
compatibility with resins)
IT **Inks**
(gravure, water-thinned; light-resistant fluorescent colorants
having good compatibility with resins)
IT Fluorescent substances
(**inks**; light-resistant fluorescent colorants having
good compatibility with resins)
IT **Aminoplasts**
(light-resistant fluorescent colorants having good
compatibility with resins)
IT 9002-86-2, PVC 9003-08-1, Melamine resin
(light-resistant fluorescent colorants having good
compatibility with resins)
IT 100-39-0, Benzyl bromide 112-29-8, 1-Bromodecane 112-82-3,
1-Bromohexadecane 139-59-3, 4-Aminodiphenyl ether
1047-16-1, Quinacridone 2696-85-7, 2-Butylaniline
6289-46-9, Dimethyl succinylsuccinate
(light-resistant fluorescent colorants having good
compatibility with resins)

L62 ANSWER 22 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:536445 HCAPLUS
DOCUMENT NUMBER: 136:152739

TITLE: The use of block-copolymeric wetting and dispersing additives for water-based coatings

AUTHOR(S): Silber, Stefan; Reuter, Ellen

CORPORATE SOURCE: Tego Chemie Service GmbH, Essen, D-45139, Germany

SOURCE: FATIPEC Congress (2000), 25th(Vol. 3), 107-120
CODEN: FAPVAP; ISSN: 0430-2222

PUBLISHER: AITIVA

DOCUMENT TYPE: Journal

LANGUAGE: English

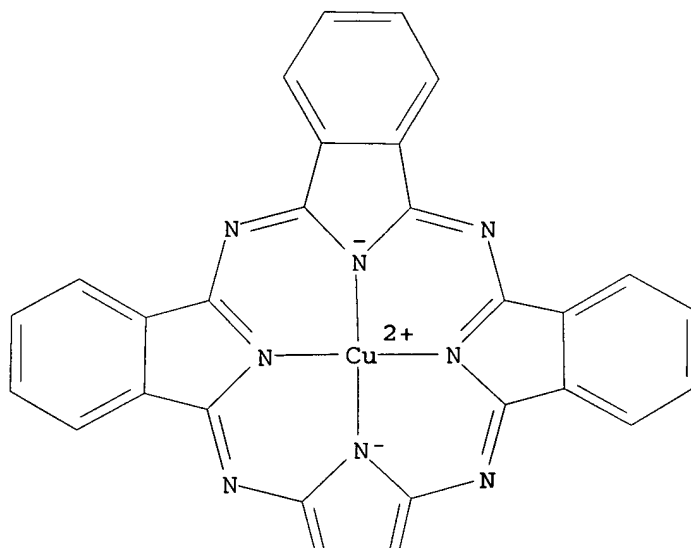
AB Several polymeric substances different in mol. structure, ionic character and **hydrophilic/hydrophobic** balance are compared concerning properties as wetting and dispersing additives. Performance in the application tests is correlated to results of particle anal. enhancing the understanding of adsorption processes (such as particle size distributions, charge measurements...).

IT 147-14-8, Heliogen Blue L 7101F
(FW 200 and **Printex** 95, pigments; use of block-copolymeric wetting and dispersing additives for water-based coatings)

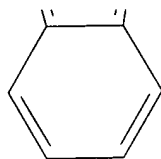
RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)- κ N29, κ N30, κ N31, κ N32]-, (SP-4-1)- (9CI)
(CA INDEX NAME)

PAGE 1-A



PAGE 2-A



IT 9003-08-1, Cymel 327
(pigmented emulsions; use of block-copolymeric wetting and dispersing additives for water-based coatings)

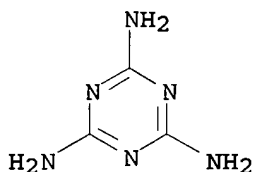
RN 9003-08-1 HCAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI)
(CA INDEX NAME)

CM 1

CRN 108-78-1

CMF C3 H6 N6



CM 2

CRN 50-00-0

CMF C H2 O

H₂C=O

CC 42-5 (Coatings, Inks, and Related Products)

IT Carbon black, uses
(FW 200 and **Printex** 95; use of block-copolymeric wetting and dispersing additives for water-based coatings)

IT 147-14-8, Heliogen Blue L 7101F
(FW 200 and **Printex** 95, pigments; use of block-copolymeric wetting and dispersing additives for water-based coatings)

IT 9003-08-1, Cymel 327 54664-34-5, Neocryl XK 90
176742-40-8, Daotan VTW 1265 318244-11-0, Bayhydrol D 155
(pigmented emulsions; use of block-copolymeric wetting and dispersing additives for water-based coatings)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L62 ANSWER 23 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:613682 HCAPLUS

DOCUMENT NUMBER: 134:87626

TITLE: Stabilizing pigments in full-mixing-systems
AUTHOR(S): Reuter, Ellen; Silber, Stefan
CORPORATE SOURCE: Essen, Germany
SOURCE: Farbe + Lack (2000), 106(5), 62,64,66,68-69
CODEN: FALAAA; ISSN: 0014-7699
PUBLISHER: Vincentz Verlag
DOCUMENT TYPE: Journal
LANGUAGE: German

AB Polymeric dispersing agents are tested via full-mixing in which unpigmented resin solns. and resin-free pigment concs. are combined with the dispersants. Measurement of streaming potential on five dispersing agents based on acrylic comb, block, and linear statistical polymers or maleic anhydride polymers with clear differences in mol. geometry, ionic character and **hydrophilic/hydrophobic** balance enabled conclusions to be drawn on their adsorption characteristics on pigment surfaces. The potentials of various classes of substances can thus be recognized and help to develop tailor-made additives to be developed for various areas of application.

IT 318245-14-6
(coating binder; stabilizing pigments in full-mixing coating systems with polymeric dispersants)

RN 318245-14-6 HCAPLUS

CN Formaldehyde, polymer with Bayhydrol D 155 and
1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 318244-11-0

CMF Unspecified

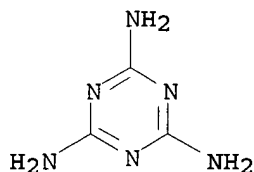
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 108-78-1

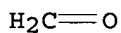
CMF C3 H6 N6



CM 3

CRN 50-00-0

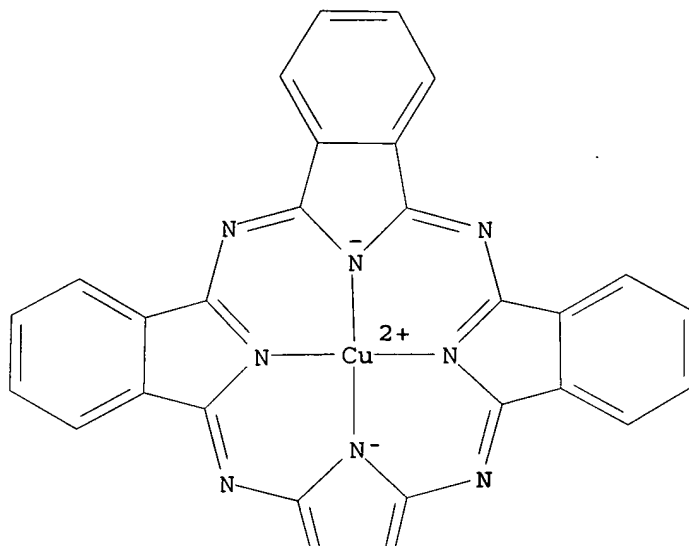
CMF C H2 O



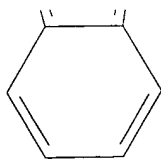
IT 147-14-8, Heliogen Blue L7101F
(stabilizing pigments in full-mixing coating systems with

polymeric dispersants)
 RN 147-14-8 HCAPLUS
 CN Copper, [29H,31H-phthalocyaninato(2-)-
 κN29,κN30,κN31,κN32]-, (SP-4-1)- (9CI)
 (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



CC 42-6 (Coatings, Inks, and Related Products)
 IT Coating materials
 (water-thinned; stabilizing pigments in
 full-mixing coating systems with polymeric dispersants)
 IT 54664-34-5, Neocryl XK90 176742-40-8, Daotan VTW 1265
 318245-14-6
 (coating binder; stabilizing pigments in full-mixing coating
 systems with polymeric dispersants)
 IT 147-14-8, Heliogen Blue L7101F 9011-13-6D, Maleic
 anhydride-styrene copolymer, esters, with hydroxy-functional
 polyethers 9011-14-7D, PMMA, hydrolyzed, esters with
 polyoxyalkylenes and anhydrides 13463-67-7, Kronos 2310, uses
 25085-34-1D, Acrylic acid-styrene copolymer, salts 29407-83-8D,
 Methacrylic acid-methyl acrylate-styrene copolymer, esters with

polyglycols

(stabilizing pigments in full-mixing coating systems with
polymeric dispersants)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L62 ANSWER 24 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:468138 HCAPLUS

DOCUMENT NUMBER: 133:90774

TITLE: Dispersants for pigments and their use in
compositions for coatings, **inks** and
color filter staining

INVENTOR(S): Kitamura, Kunji; Matsushita, Gensho; Sato,
Takanori

PATENT ASSIGNEE(S): Sanyo Color Works, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 2000191937	A2	20000711	JP 1998-366639	

1998
1224

PRIORITY APPLN. INFO.: JP 1998-366639

1998
1224

OTHER SOURCE(S): MARPAT 133:90774

AB The dispersants useful for organic pigments in nonaq. medium are
comps. $Z[SO_2NH(CH_2)mNMe_2]_n$ ($Z = ANXNA$; where A = optionally
substituted PhCH₂ or Ph groups; X = diimide-forming center group
derived from 1,4,5,8-tetracarboxynaphthalene; provided that the
sulfamide group is **linked** to either Ph or naphthalene
group of X; m = 1-6; n = 1-4). Thus, imidizing
naphthalene-1,4,5,8-tetracarboxylic anhydride with PhCH₂NH₂, and
heating the resulting diimide with chlorosulfonic acid and thionyl
chloride at 60° for 5 h gave a chlorosulfonated product
which was amidated with **dimethylaminopropylamine** to give
a dispersant. Mixing C.I. Pigment Green 36 9.0 with the
dispersant above 1.0, Phthalkyd 133-60 (alkyd resin) 26.4,
Super-Beckamine G 821-60 (melamine resin) 13.6, a 8/2 xylene-BuOH
mixture 20.0 and alumina beads 100 parts in a glass container,
adding the alkyd resin 31.9 and melamine resin 16.4 parts,
dispersing for 10 min and separating the alumina beads gave a coating
with viscosity 3210 and 1250 cP-s at 6 and 60 rpm, resp., coat
film gloss after baking on an Al plate 78.6% and no phase separation

IT 9003-08-1, Super-Beckamine G 821-60
(curing agents for coating; manufacture of dispersants for pigments
and use in comps. for coatings, **inks** and color
filter staining)

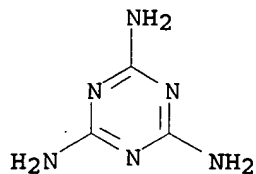
RN 9003-08-1 HCAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI)
(CA INDEX NAME)

CM 1

CRN 108-78-1

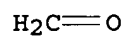
CMF C3 H6 N6



CM 2

CRN 50-00-0

CMF C H2 O



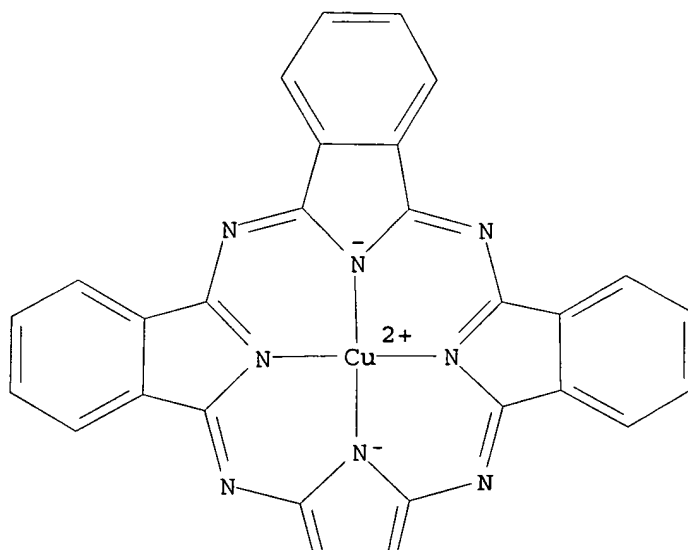
IT 147-14-8, C.I. Pigment Blue 15 215247-95-3, C.I.
Pigment Violet 23

(pigments; manufacture of dispersants for pigments and use in
compos. for coatings, **inks** and color filter staining)

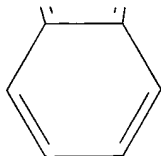
RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-
κN29,κN30,κN31,κN32]-, (SP-4-1)- (9CI)
(CA INDEX NAME)

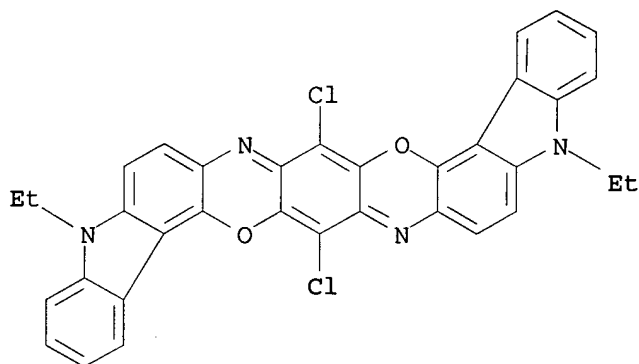
PAGE 1-A



PAGE 2-A



RN 215247-95-3 HCAPLUS
 CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-dihydro- (9CI) (CA INDEX NAME)



IC ICM C09B067-20
 ICS C09D007-12; C09D011-02; C09D017-00
 CC 42-6 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 41, 46, 76
 ST pigment dispersant tetracarboxynaphthalene diimide sulfamide deriv
 manuf; **ink** pigment dispersant tetracarboxynaphthalene
 diimide sulfamide deriv manuf; coating pigment dispersant
 tetracarboxynaphthalene diimide sulfamide deriv manuf; color
 filter pigment dispersant tetracarboxynaphthalene diimide
 sulfamide deriv manuf
 IT Alkyd resins
 (coating binders from Phthalkyd 133-60; manufacture of dispersants
 for pigments and use in compns. for coatings, **inks**
 and color filter staining)
 IT **Aminoplasts**
 (curing agents for coating; manufacture of dispersants for pigments
 and use in compns. for coatings, **inks** and color
 filter staining)
 IT **Inks**
 (gravure; manufacture of dispersants for pigments and use in compns.
 for coatings, **inks** and color filter staining)
 IT Polyurethanes, uses
 (**ink** binders; manufacture of dispersants for pigments and
 use in compns. for coatings, **inks** and color filter
 staining)
 IT Coating materials
 Dispersing agents

Pigments, nonbiological
 (manufacture of dispersants for pigments and use in compns. for coatings, **inks** and color filter staining)

IT 9003-08-1, Super-Beckamine G 821-60
 (curing agents for coating; manufacture of dispersants for pigments and use in compns. for coatings, **inks** and color filter staining)

IT 282102-91-4 282102-92-5 282102-93-6 282102-94-7
 282102-95-8
 (dispersants for pigments and use in compns. for coatings, **inks** and color filter staining)

IT 282102-96-9P
 (intermediate; manufacture of dispersants for pigments and use in compns. for coatings, **inks** and color filter staining)

IT 97-88-1D, Butyl methacrylate, acrylic resins
 (manufacture of dispersants for pigments and use in compns. for coatings, **inks** and color filter staining)

IT 147-14-8, C.I. Pigment Blue 15 980-26-7, C.I. Pigment Red 122 14302-13-7, C.I. Pigment Green 36 36888-99-0, C.I. Pigment Yellow 139 215247-95-3, C.I. Pigment Violet 23
 (pigments; manufacture of dispersants for pigments and use in compns. for coatings, **inks** and color filter staining)

IT 81-30-1 100-36-7 100-46-9, Benzylamine, reactions 104-84-7, p-Methylbenzylamine 104-86-9, p-Chlorobenzylamine 106-49-0, p-Toluidine, reactions 109-55-7 123-00-2, 4-Morpholinepropanamine 7790-94-5, Chlorosulfonic acid 25560-00-3 61699-88-5, **Dibutylaminopropylamine**
 (reactant; manufacture of dispersants for pigments and use in compns. for coatings, **inks** and color filter staining)

L62 ANSWER 25 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2000:356382 HCAPLUS
 DOCUMENT NUMBER: 132:349114
 TITLE: **Hydrophilic** resin-containing aqueous **inks** with alkali resistance
 INVENTOR(S): Izumiya, Tetsu; Nozaki, Chiyoshi
 PATENT ASSIGNEE(S): Minolta Camera Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 2000144024	A2	20000526	JP 1998-317204	1998 1109

PRIORITY APPLN. INFO.: JP 1998-317204
 1998
 1109

OTHER SOURCE(S): MARPAT 132:349114
 AB Title **inks** contain cationic **hydrophilic** resins prepared by reaction of **hydrophilic** haloalcs. and/or haloethers with resins from diisocyanates and amino group-containing polyols and/or amines. An aqueous **ink** containing C.I. pigment red 122 and 3-chloropropanol-cationized PEGPA 1000-IPDI-

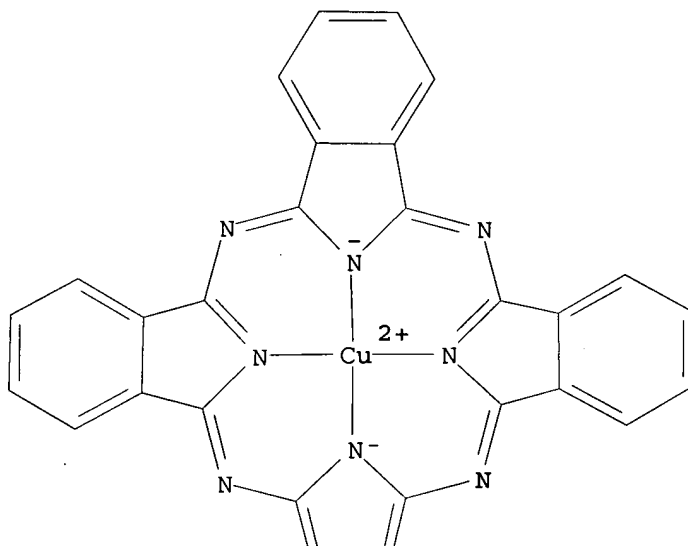
methyliminobis(propylamine) copolymer showed viscosity 2.4 cP and good alkali resistance.

IT 147-14-8, C.I. Pigment blue 15:3 50925-42-3,
C.I. Direct Yellow 122
(aqueous inks containing cationic
hydrophilic polyurethanes for gel prevention and high
alkali resistance)

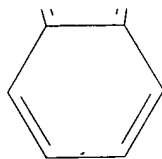
RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-
 κ N29, κ N30, κ N31, κ N32]-, (SP-4-1)- (9CI)
(CA INDEX NAME)

PAGE 1-A



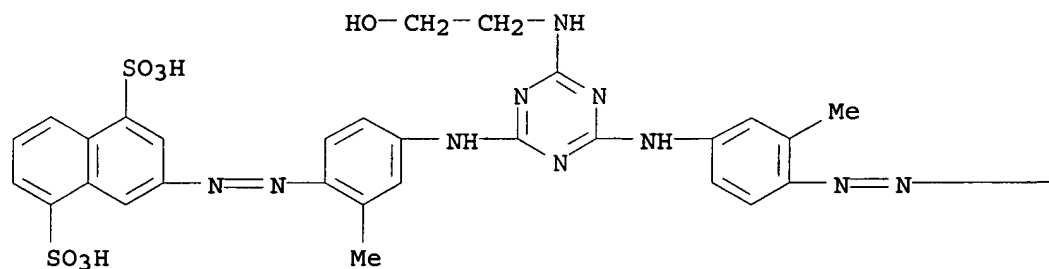
PAGE 2-A



RN 50925-42-3 HCAPLUS

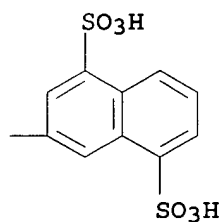
CN 1,5-Naphthalenedisulfonic acid, 3,3'-[[6-[(2-hydroxyethyl)amino]-
1,3,5-triazine-2,4-diyl]bis[imino(2-methyl-4,1-phenylene)azo]]bis-
, tetrasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



● 4 Na

PAGE 1-B



- IC ICM C09D011-00
ICS B41J002-01; B41M005-00; C09D011-10
CC 42-12 (Coatings, Inks, and Related Products)
ST alkali resistance aq ink cationic **hydrophilic**
polyurethane; gel prevention aq ink cationic
hydrophilic polyurethane
IT **Inks**
(aqueous **inks** containing cationic **hydrophilic**
polyurethanes for gel prevention and high alkali resistance)
IT Polyurethanes, uses
(aqueous **inks** containing cationic **hydrophilic**
polyurethanes for gel prevention and high alkali resistance)
IT Carbon black, uses
(aqueous **inks** containing cationic **hydrophilic**
polyurethanes for gel prevention and high alkali resistance)
IT 263560-18-5P
(aqueous **inks** containing cationic **hydrophilic**
polyurethanes for gel prevention and high alkali resistance)
IT 147-14-8, C.I. Pigment blue 15:3 980-26-7, C.I.
Pigment red 122 5580-57-4, C.I. Pigment yellow
93 12222-04-7, C.I. Direct Blue 199 18472-87-2, C.I. Acid red
92 50925-42-3, C.I. Direct Yellow 122
(aqueous **inks** containing cationic
hydrophilic polyurethanes for gel prevention and high
alkali resistance)

L62 ANSWER 26 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:365780 HCAPLUS

DOCUMENT NUMBER: 131:46076
 TITLE: Manufacture of **aqueous pigment** dispersions with good dispersibility and storage stability and **water-thinned coloring** solutions containing them
 INVENTOR(S): Takao, Nagayuki; Seki, Toshihiro
 PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 11152424	A2	19990608	JP 1997-322879	1997 1125

PRIORITY APPLN. INFO.: JP 1997-322879
 1997
 1125

AB Title dispersions are manufactured by preparing aqueous solns. or dispersions containing (A1) water-soluble resins obtained by neutralizing the acid groups of **hydrophobic** resins having crosslinkable functional groups and acid groups, (B) pigments, and (C) crosslinking agents and then reacting (C) with the crosslinking groups of (A1) to precipitate the crosslinked products on (B). Alternatively, the dispersions are manufactured by preparing aqueous solns. or dispersions containing (A2) water-soluble resins obtained by neutralizing the acid groups of **hydrophobic** resins having self-crosslinkable functional groups and acid groups and (B) pigments and then self-crosslinking (A2) to precipitate the crosslinked products on (B). Solns. containing the above dispersions, may be useful for **inks**, recording solns., or coatings. Thus, Bu methacrylate 630, Bu acrylate 50, 2-hydroxyethyl methacrylate 150, and acrylic acid 170 parts were polymerized in the presence of Perbutyl O (tert-Bu peroxy-2-ethylhexanoate) in iso-Pr alc. to obtain a 50%-volatile solution, 16 parts of which ws mixed with Nikalac MX 035 (methylolated melamine) 2, 20% aqueous NaOH 2.2, H₂O 59.8, and Fastogen Blue TGR (cyanine blue pigment) 20 parts and crosslinked at 140° to give a pigment dispersion with good storage stability.

IT **227473-71-4P**
 (manufacture of storage-stable **aqueous** dispersions of **pigments** coated with crosslinked resins for **water-thinned coloring** solns.)

RN 227473-71-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl 2-propenoate, formaldehyde, 2-hydroxyethyl 2-methyl-2-propenoate, 2-propenoic acid and 1,3,5-triazine-2,4,6-triamine, sodium salt (9CI) (CA INDEX NAME)

CM 1

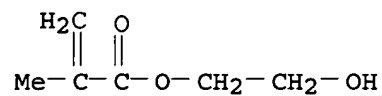
CRN 227473-70-3

CMF (C8 H14 O2 . C7 H12 O2 . C6 H10 O3 . C3 H6 N6 . C3 H4 O2 . C

CCI H2 O)x
PMS

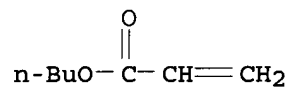
CM 2

CRN 868-77-9
CMF C6 H10 O3



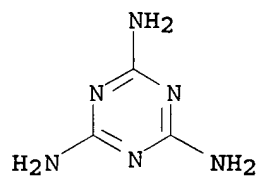
CM 3

CRN 141-32-2
CMF C7 H12 O2



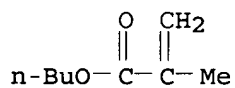
CM 4

CRN 108-78-1
CMF C3 H6 N6



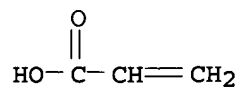
CM 5

CRN 97-88-1
CMF C8 H14 O2



CM 6

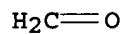
CRN 79-10-7
CMF C3 H4 O2



CM 7

CRN 50-00-0

CMF C H2 O

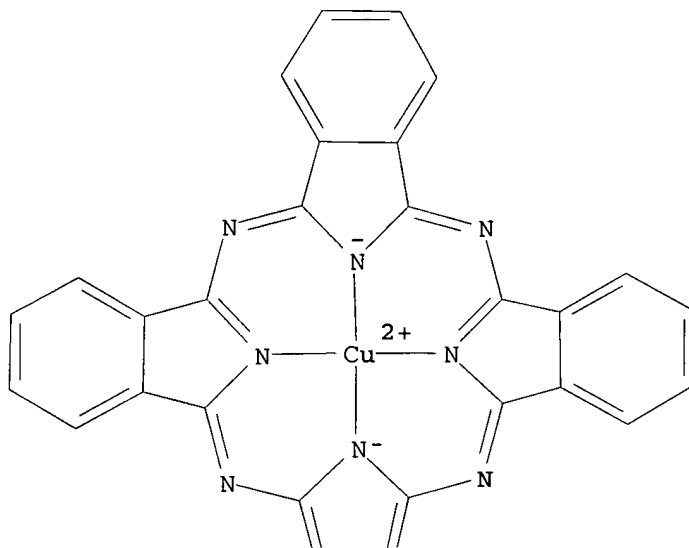


IT 147-14-8, Fastogen Blue TGR
(manufacture of storage-stable **aqueous** dispersions of
pigments coated with crosslinked resins for
water-thinned coloring solns.)

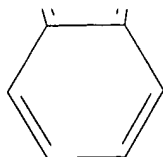
RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-
 $\kappa\text{N}29,\kappa\text{N}30,\kappa\text{N}31,\kappa\text{N}32$]-, (SP-4-1)- (9CI)
(CA INDEX NAME)

PAGE 1-A



PAGE 2-A



- IC ICM C09C003-10
ICS C08J003-20; C08J003-24; C09D005-00; C09D011-00; C09D017-00;
C09D133-06
- CC 42-6 (**Coatings, Inks, and Related Products**)
- ST pigment dispersion coating storage stability; crosslinked acrylic
resin coated pigment coating; **water** thinned coating
pigment dispersibility
- IT Carbon black, uses
(H 960; manufacture of storage-stable **aqueous** dispersions of
pigments coated with crosslinked resins for
water-thinned coloring solns.)
- IT **Inks**
(flexog.; manufacture of storage-stable **aqueous** dispersions of
pigments coated with crosslinked resins for
water-thinned coloring solns.)
- IT Disperse systems
Pigments, nonbiological
(manufacture of storage-stable **aqueous** dispersions of
pigments coated with crosslinked resins for
water-thinned coloring solns.)
- IT Coating materials
Inks
(water-thinned; manufacture of storage-stable **aqueous**
dispersions of **pigments** coated with crosslinked
resins for **water-thinned coloring solns.**)
- IT 227202-27-9P 227202-28-0P 227202-29-1P 227202-30-4P
227473-71-4P
(manufacture of storage-stable **aqueous** dispersions of
pigments coated with crosslinked resins for
water-thinned coloring solns.)
- IT 147-14-8, Fastogen Blue TGR 980-26-7, Fastogen Super
Magenta RTS 4531-49-1, Symuler Fast Yellow 8GF 5521-31-3,
Fastogen Super Maroon PSK
(manufacture of storage-stable **aqueous** dispersions of
pigments coated with crosslinked resins for
water-thinned coloring solns.)
- IT 68134-22-5, Symuler Fast Yellow 4192
(manufacture of storage-stable **aqueous** dispersions of
pigments coated with crosslinked resins for
water-thinned coloring solns.)

L62 ANSWER 27 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:650445 HCAPLUS

DOCUMENT NUMBER: 129:317642

TITLE: Pigment dispersants and pigment compositions
and dispersions and coating compositions
containing the same for hard and glossy
inks and coatings

INVENTOR(S): Uekubo, Takashi; Omura, Toru; Sawamura,
Katsuhiko

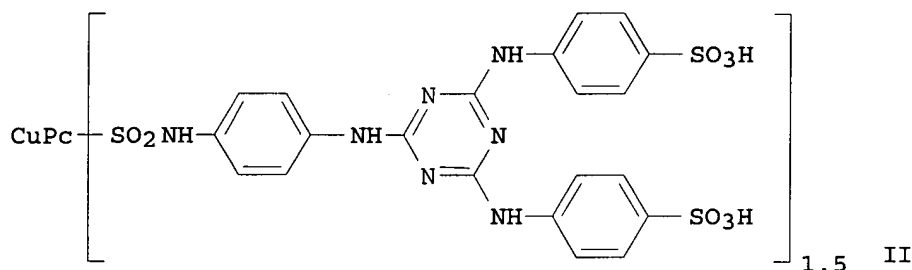
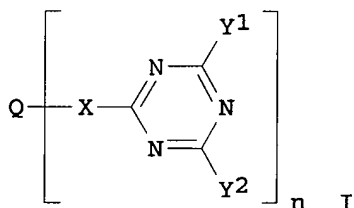
PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10265697	A2	19981006	JP 1997-69905	1997 0324

PRIORITY APPLN. INFO.: JP 1997-69905

1997
0324

OTHER SOURCE(S): MARPAT 129:317642
 GI



AB The title dispersants are I, wherein Q = anthraquinone, acridone, organic dye residue; X = NH, CONR₁ZNR₂, SO₂NR₁ZNR₂, CH₂NR₁ZNR₂, CH₂NHCOCH₂NR₁ZNR₂; Y₁ = NHZSO₃M, OZSO₃M; Y₂ = OH, alkoxy, Y₁; Z = C₁-20 alkylene, alkenylene, arylene; R₁, R₂ = H, alkyl; M = cation; n = 1-4. II was prepared and used as dispersant for C.I. Pigment Blue 15:1 in solvent-based acrylic-melamine compns.

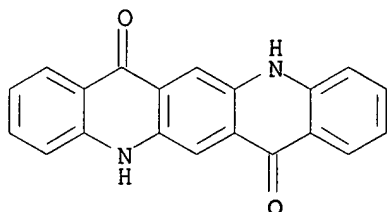
IT 1047-16-1DP, Quinacridone, chloroacetamidomethylated, reaction products with [bis(sulfoanilino)triazinylamino]aniline 214827-67-5DP, reaction products with sulfonated copper phthalocyanine 214827-68-6P 214827-69-7DP, reaction products with sulfonated copper phthalocyanine 214827-70-0DP, reaction products with sulfonated copper phthalocyanine 214827-71-1DP, reaction products with sulfonated quinacridone 214827-72-2P

214827-74-4P 214827-76-6P

(pigment dispersants and pigment compns. and dispersions and coating compns. containing the same for hard and glossy inks and coatings)

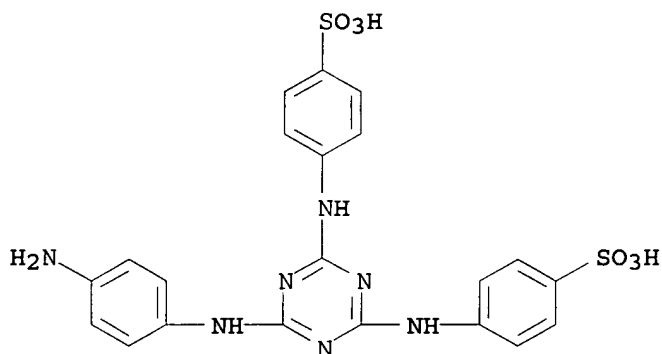
RN 1047-16-1 HCAPLUS

CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
(CA INDEX NAME)



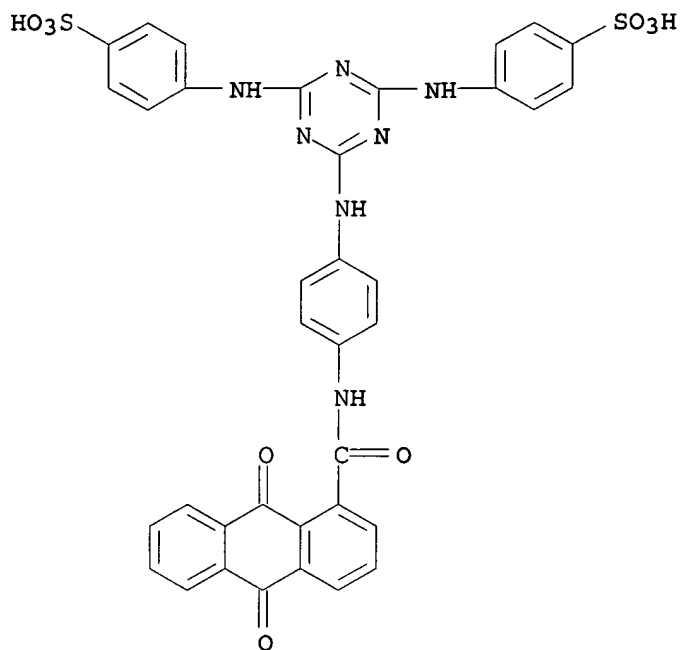
RN 214827-67-5 HCAPLUS

CN Benzenesulfonic acid, 4,4'-[[6-[(4-aminophenyl)amino]-1,3,5-triazine-2,4-diyl]diimino]bis- (9CI) (CA INDEX NAME)

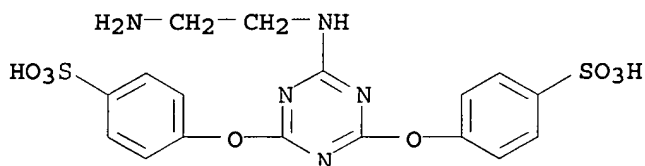


RN 214827-68-6 HCAPLUS

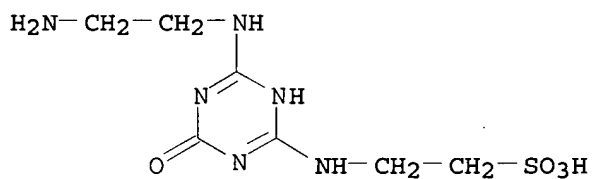
CN Benzenesulfonic acid, 4,4'-[[6-[[4-[[[(9,10-dihydro-9,10-dioxo-1-anthracenyl)carbonyl]amino]phenyl]amino]-1,3,5-triazine-2,4-diyl]diimino]bis- (9CI) (CA INDEX NAME)



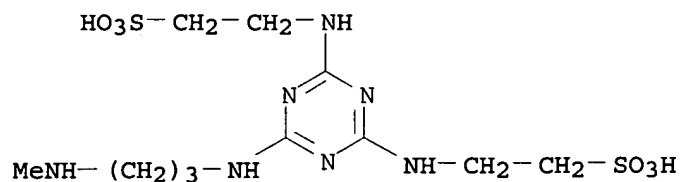
RN 214827-69-7 HCAPLUS
 CN Benzenesulfonic acid, 4,4'-[[6-[(2-aminoethyl)amino]-1,3,5-triazine-2,4-diyl]bis(oxy)]bis- (9CI) (CA INDEX NAME)



RN 214827-70-0 HCAPLUS
 CN Ethanesulfonic acid, 2-[[6-[(2-aminoethyl)amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

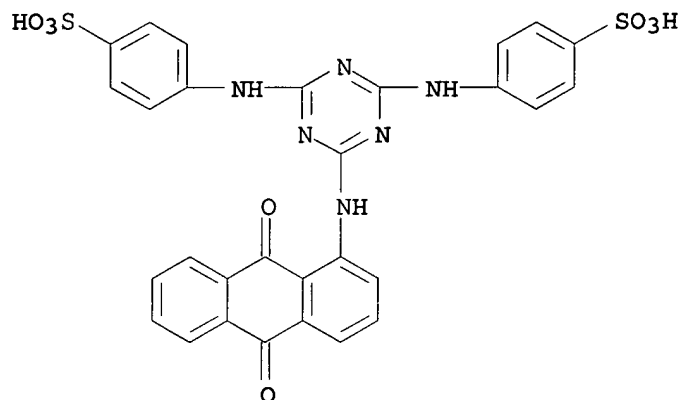


RN 214827-71-1 HCAPLUS
 CN Ethanesulfonic acid, 2,2'-[[6-[[3-(methylamino)propyl]amino]-1,3,5-triazine-2,4-diyl]diimino]bis- (9CI) (CA INDEX NAME)



RN 214827-72-2 HCAPLUS

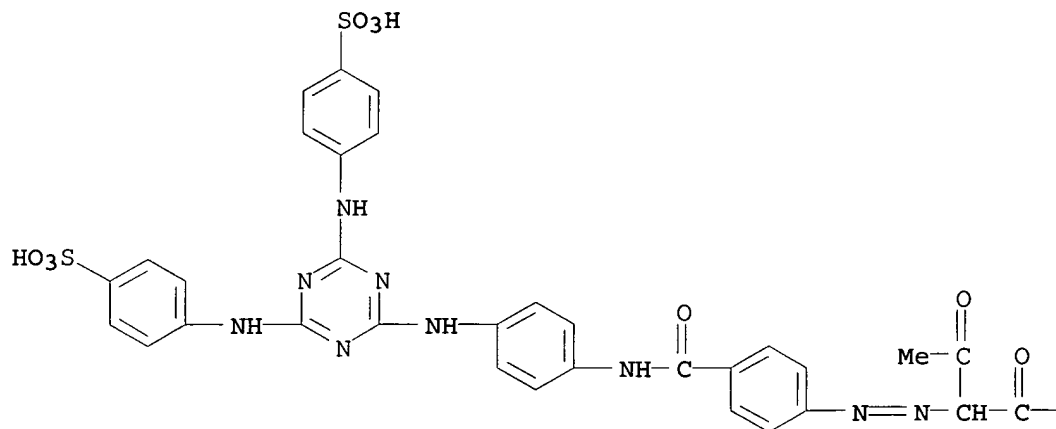
CN Benzenesulfonic acid, 4,4'-[[6-[(9,10-dihydro-9,10-dioxo-1-anthracenyl)amino]-1,3,5-triazine-2,4-diyl]diimino]bis- (9CI) (CA INDEX NAME)



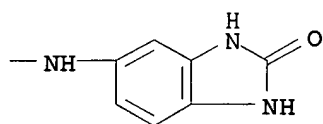
RN 214827-74-4 HCAPLUS

CN Benzenesulfonic acid, 4,4'-[[6-[[4-[[4-[[1-[[2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)amino]carbonyl]-2-oxopropyl]azo]benzoyl]amino]phenyl]amino]-1,3,5-triazine-2,4-diyl]diimino]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



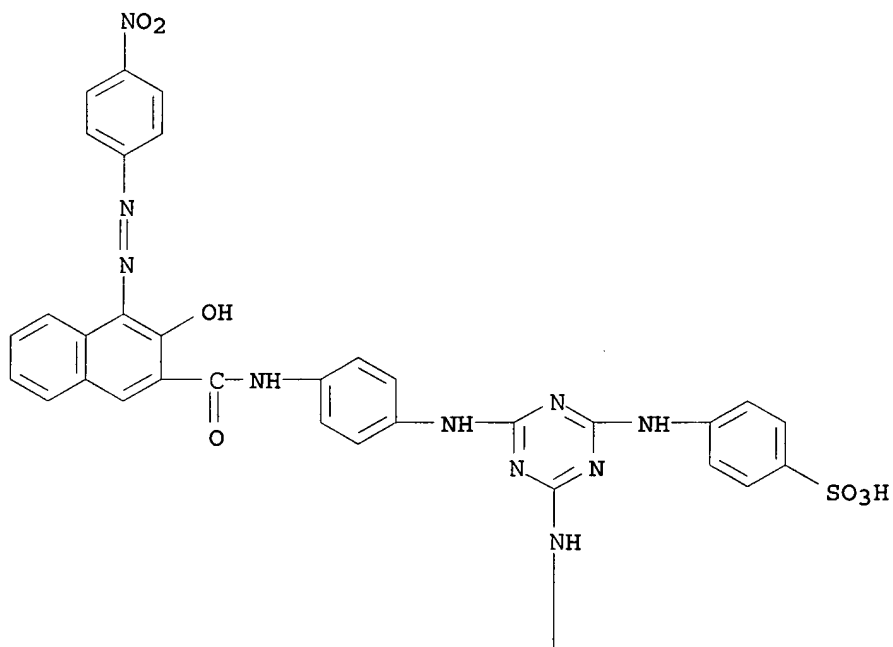
PAGE 1-B



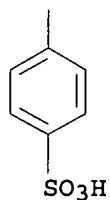
RN 214827-76-6 HCAPLUS

CN Benzenesulfonic acid, 4,4'-[[6-[[4-[[[3-hydroxy-4-[(4-nitrophenyl)azo]-2-naphthalenyl]carbonyl]amino]phenyl]amino]-1,3,5-triazine-2,4-diyl]diimino]bis- (9CI) (CA INDEX NAME)

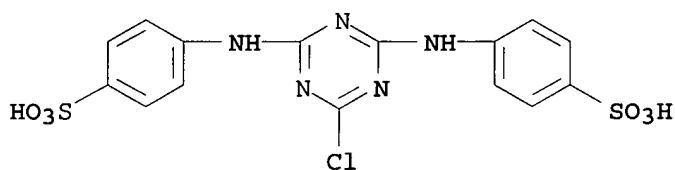
PAGE 1-A



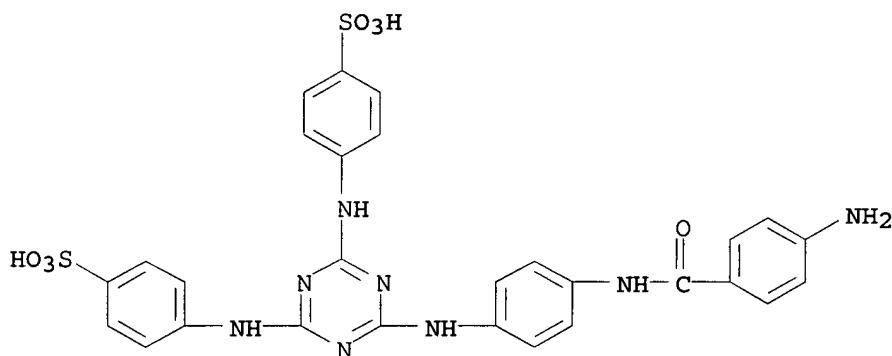
PAGE 2-A



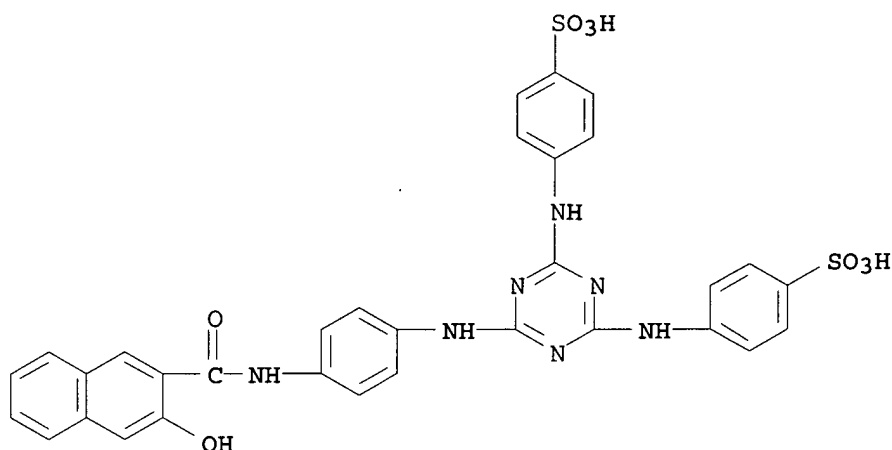
IT 41484-72-4P 214827-73-3P 214827-75-5P
 (pigment dispersants and pigment compns. and dispersions and
 coating compns. containing the same for hard and glossy
 inks and coatings)
 RN 41484-72-4 HCAPLUS
 CN Benzenesulfonic acid, 4,4'-[(6-chloro-1,3,5-triazine-2,4-
 diyl)diimino]bis- (9CI) (CA INDEX NAME)



RN 214827-73-3 HCAPLUS
 CN Benzenesulfonic acid, 4,4'-[[6-[[4-[[4-
 aminobenzoyl]amino]phenyl]amino]-1,3,5-triazine-2,4-
 diyl]diimino]bis- (9CI) (CA INDEX NAME)



RN 214827-75-5 HCAPLUS
 CN Benzenesulfonic acid, 4,4'-[[6-[[4-[[[3-hydroxy-2-
 naphthalenyl]carbonyl]amino]phenyl]amino]-1,3,5-triazine-2,4-
 diyl]diimino]bis- (9CI) (CA INDEX NAME)



IT 214827-66-4

(pigment dispersants and pigment compns. and dispersions and coating compns. containing the same for hard and glossy inks and coatings)

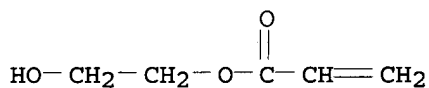
RN 214827-66-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate, formaldehyde, 2-hydroxyethyl 2-propenoate and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 818-61-1

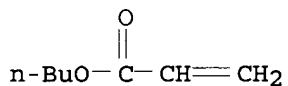
CMF C5 H8 O3



CM 2

CRN 141-32-2

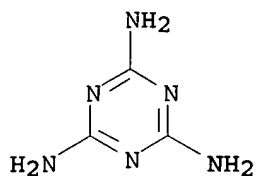
CMF C7 H12 O2



CM 3

CRN 108-78-1

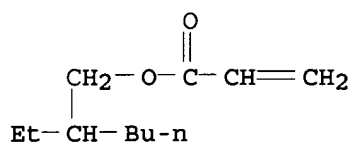
CMF C3 H6 N6



CM 4

CRN 103-11-7

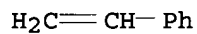
CMF C11 H20 O2



CM 5

CRN 100-42-5

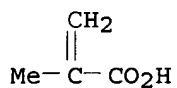
CMF C8 H8



CM 6

CRN 79-41-4

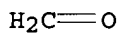
CMF C4 H6 O2



CM 7

CRN 50-00-0

CMF C H2 O

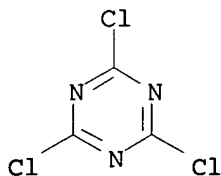


IT 108-77-0

(pigment dispersants and pigment compns. and dispersions and coating compns. containing the same for hard and glossy inks and coatings)

RN 108-77-0 HCAPLUS

CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)



- IC ICM C09B067-46
ICS C09D017-00; C09D161-20; C09D201-00
- CC 42-6 (**Coatings, Inks, and Related Products**)
Section cross-reference(s): 41
- ST pigment dispersant **ink** coating
- IT Coating materials
Dispersing agents
Inks
Pigments, nonbiological
(pigment dispersants and pigment compns. and dispersions and coating compns. containing the same for hard and glossy **inks** and coatings)
- IT 147-14-8DP, Copper phthalocyanine, sulfonated, reaction products with [bis(sulfoanilino)**triazinylamino**]aniline
1047-16-1DP, Quinacridone, chloroacetamidomethylated, reaction products with [bis(sulfoanilino)**triazinylamino**]aniline 214827-67-5DP, reaction products with sulfonated copper phthalocyanine 214827-68-6P
214827-69-7DP, reaction products with sulfonated copper phthalocyanine 214827-70-0DP, reaction products with sulfonated copper phthalocyanine 214827-71-1DP, reaction products with sulfonated quinacridone 214827-72-2P
214827-74-4P 214827-76-6P
(pigment dispersants and pigment compns. and dispersions and coating compns. containing the same for hard and glossy **inks** and coatings)
- IT 41484-72-4P 214827-73-3P 214827-75-5P
(pigment dispersants and pigment compns. and dispersions and coating compns. containing the same for hard and glossy **inks** and coatings)
- IT 119510-12-2, Solspers 24000 181231-93-6, BYK170
214827-66-4
(pigment dispersants and pigment compns. and dispersions and coating compns. containing the same for hard and glossy **inks** and coatings)
- IT 82-45-1, 1-**Aminoanthraquinone** 98-67-9,
4-Hydroxybenzenesulfonic acid 100-01-6, p-Nitroaniline, reactions 108-77-0 122-04-3, p-Nitrobenzoyl chloride
1001-53-2, N-Acetylenethylenediamine 1734-00-5,
2-Hydroxy-3-naphthoyl chloride 6291-84-5, N-Methyl-1,3-propanediamine 26576-46-5 53453-81-9, Anthraquinone-1-carbonyl chloride
(pigment dispersants and pigment compns. and dispersions and coating compns. containing the same for hard and glossy **inks** and coatings)
- IT 147-14-8, C.I. Pigment Blue 15:1 3049-71-6, C.I. Pigment Red 178
3089-17-6, C.I. Pigment Red 202 4051-63-2, C.I. Pigment Red 177
14302-13-7, C.I. Pigment Green 36 68134-22-5, C.I. Pigment Yellow 154 84632-65-5

(pigment dispersants and pigment compns. and dispersions and coating compns. containing the same for hard and glossy inks and coatings)

L62 ANSWER 28 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:527379 HCAPLUS

DOCUMENT NUMBER: 129:176908

TITLE: Soluble chromophores having improved solubilizing groups and their use

INVENTOR(S): Hall-Gouille, Veronique; Bize, Aline

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9832802	A1	19980730	WO 1998-EP248	1998 0117
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2275965	AA	19980730	CA 1998-2275965	1998 0117
AU 9862109	A1	19980818	AU 1998-62109	1998 0117
EP 968250	A1	20000105	EP 1998-904092	1998 0117
EP 968250	B1	20010418		
R: CH, DE, FR, GB, IT, LI				
JP 2001513119	T2	20010828	JP 1998-531549	1998 0117
TW 444051	B	20010701	TW 1998-87100901	1998 0123
US 6274728	B1	20010814	US 1999-465868	1999 1216
PRIORITY APPLN. INFO.:			CH 1997-171	A 1997 0127
			WO 1998-EP248	W 1998 0117

US 1998-13659

B1

1998

0226

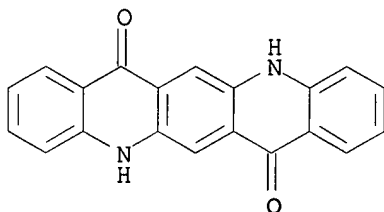
OTHER SOURCE(S): MARPAT 129:176908

AB The colorants A(B)x (x = 1-8; A = radical of a chromophore of the quinacridone, anthraquinone, perylene, indigo, quinophthalone, indanthrone, isoindolinone, isoindoline, dioxazine, azo, phthalocyanine or diketopyrrolopyrrole series; B = H or solubilizing group) are obtained whereby A is bonded to x groups B via one or more hetero atoms, those hetero atoms being selected from the group consisting of N, O, and S and forming part of the radical A. The colorants are used in high-mol.-weight organic materials, thermo-, photo-, or chemo-sensitive recording materials, light-sensitive neg. or pos. resist compns., ink compns. for ink-jet printing, and color tapes for thermal transfer printing. The soluble chromophore derivs. can be converted to the underivatized form (B = H) by heating after they are incorporated into a substrate. Thus, bis(1,1-dimethyl-3,7-dioxa-1-heptyl) oxydicarbonate was prepared and used to treat C.I. Pigment Violet 37, giving the red tetrakis(1,1,-dimethyl-3,7-dioxa-1-heptyloxycarbonyl) derivative of C.I. Pigment Violet 37 in 65% yield; this pigment was used in a coating composition

IT 1047-16-1DP, C.I. Pigment Violet 19, derivs.
(preparation of pigments containing labile solubilizing groups)

RN 1047-16-1 HCAPLUS

CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
(CA INDEX NAME)



IT 9003-08-1, Cymel 300
(preparation of pigments containing labile solubilizing groups for coloration of coatings containing)

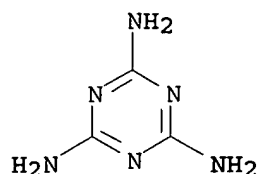
RN 9003-08-1 HCAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI)
(CA INDEX NAME)

CM 1

CRN 108-78-1

CMF C3 H6 N6



CM 2

CRN 50-00-0

CMF C H2 O

H₂C=O

- IC ICM C09B069-08
ICS C09B001-00; C09B001-36; C09B005-62; C09B007-02; C09B019-02;
C09B043-00; C09B047-08; C09B048-00; C09B057-00; C09B057-04;
C09B025-00; C09B067-48; G03C007-12; G03F001-10; C09D011-00;
C08K005-205; B41M005-00
- CC 41-1 (Dyes, Organic Pigments, Fluorescent Brighteners, and
Photographic Sensitizers)
Section cross-reference(s): 42
- IT **Inks**
(jet-printing; preparation of pigments containing
labile solubilizing groups for coloration of)
- IT Negative photoresists
Optical recording materials
Positive photoresists
Thermal-transfer **printing**
(preparation of pigments containing labile solubilizing groups for)
- IT **Aminoplasts**
(preparation of pigments containing labile solubilizing groups for
coloration of coatings containing)
- IT 147-14-8DP, Copper phthalocyanine, **aminomethyl** derivs.
211321-86-7P 211321-87-8P 211321-89-0P 211321-91-4P
211321-92-5P 211321-93-6P 211321-94-7P 211321-95-8P
211321-96-9P 211321-97-0P 211321-98-1P 211321-99-2P
211322-00-8P 211322-01-9P 211322-02-0P 211322-03-1P
211322-04-2P 211322-05-3P 211322-06-4P 211322-07-5P
211322-08-6P 211322-09-7P 211322-11-1P 211322-13-3P
(pigment; preparation of pigments containing labile solubilizing groups)
- IT 130-20-1DP, C.I. Pigment Blue 64, derivs. **1047-16-1DP**,
C.I. Pigment Violet 19, derivs. 3089-17-6DP, C.I. Pigment Red
202, derivs. 3905-19-9DP, C.I. Pigment Red 166, derivs.
5102-83-0DP, C.I. Pigment Yellow 13, derivs. 5280-74-0DP, C.I.
Pigment Orange 31, derivs. 5280-78-4DP, C.I. Pigment Red 144,
derivs. 5280-80-8DP, C.I. Pigment Yellow 95, derivs.
5437-88-7DP, C.I. Pigment Blue 26, derivs. 5567-15-7DP, derivs.
5580-57-4DP, C.I. Pigment Yellow 93, derivs. 5590-18-1DP, C.I.
Pigment Yellow 110, derivs. 6358-31-2DP, C.I. Pigment Yellow 74,
derivs. 10127-03-4DP, C.I. Pigment Blue 25, derivs.
13515-40-7DP, C.I. Pigment Yellow 73, derivs. 20981-12-8DP, C.I.
Pigment Red 222, derivs. 29920-31-8DP, C.I. Pigment Yellow 120,
derivs. 31837-42-0DP, C.I. Pigment Yellow 151, derivs.
35636-63-6DP, C.I. Pigment Yellow 175, derivs. 35869-64-8DP,

C.I. Pigment Brown 23, derivs. 36888-99-ODP, C.I. Pigment Yellow 139, derivs. 40618-31-3DP, C.I. Pigment Red 214, derivs. 51920-12-8DP, C.I. Pigment Red 185, derivs. 52238-92-3DP, C.I. Pigment Red 242, derivs. 54660-00-3DP, C.I. Pigment Red 255, derivs. 68134-22-5DP, C.I. Pigment Yellow 154, derivs. 68259-05-2DP, C.I. Pigment Red 220, derivs. 71566-54-6DP, C.I. Pigment Red 221, derivs. 74441-05-7DP, C.I. Pigment Yellow 181, derivs. 76199-85-4DP, C.I. Pigment Yellow 185, derivs. 77804-81-0DP, C.I. Pigment Yellow 180, derivs. 79953-85-8DP, C.I. Pigment Yellow 128, derivs. 82199-12-0DP, C.I. Pigment Yellow 194, derivs. 84632-50-8DP, C.I. Pigment Orange 71, derivs. 84632-59-7DP, C.I. Pigment Orange 73, derivs. 84632-65-5DP, derivs. 88949-33-1DP, C.I. Pigment Red 264, derivs. 99402-80-9DP, C.I. Pigment Red 184, derivs. 211322-16-6DP, derivs. 211502-16-8DP, C.I. Pigment Brown 41, derivs. 211502-17-9DP, C.I. Pigment Brown 42, derivs. 211502-18-0DP, C.I. Pigment Red 248, derivs. 211502-19-1DP, C.I. Pigment Red 262, derivs.

(preparation of pigments containing labile solubilizing groups)

IT 9003-08-1, Cymel 300 24979-70-2, Maruka Lyncur PHM-C

(preparation of pigments containing labile solubilizing groups for coloration of coatings containing)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L62 ANSWER 29 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:334798 HCAPLUS

DOCUMENT NUMBER: 129:82856

TITLE: Ink-jet ink set

and recording and recording apparatus using the same for color images with no bleeding between black and color inks and giving black images with good water and light resistance

INVENTOR(S): Teraoka, Hisashi; Katsuragi, Takashi; Oosuni, Koichi; Takisawa, Yoshihisa; Hattori, Yoshifumi

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 10140064	A2	19980526	JP 1996-315675	

1996

1113

PRIORITY APPLN. INFO.: JP 1996-315675

1996

1113

AB The title set comprises a black ink using carbon black colorant having hydrophilic groups introduced on the surface directly or via certain groups of atoms for self dispersion capabilities and color inks using colorants

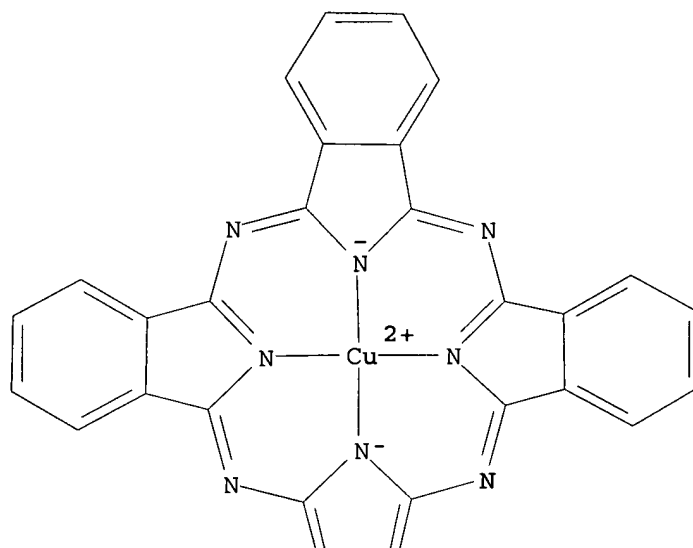
having polarity opposite to the black ink. An ink set comprises a black ink from p-trimethylammoniobenzenediazonium-treated carbon black, ethylene glycol, triethylene glycol, 1,5-pentanediol, and water; a water-thinned yellow ink based on C.I. Acid Yellow 23 (anionic); a water-thinned magenta ink based on C.I. Acid Red 52 (anionic); and a water-thinned cyan ink based on C.I. Direct Blue 199 (anionic).

IT 147-14-8D, sulfonated, triazinetriamine group-containing
163212-03-1 163212-04-2 179629-44-8
209005-08-3

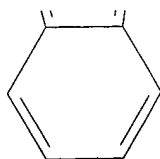
(ink-jet ink set and recording and recording apparatus using the same for color images with no bleeding between black and color inks and giving black images with good water and light resistance)

RN 147-14-8 HCAPLUS
CN Copper, [29H,31H-phthalocyaninato(2-)-
 κ N29, κ N30, κ N31, κ N32]-, (SP-4-1)- (9CI)
(CA INDEX NAME)

PAGE 1-A

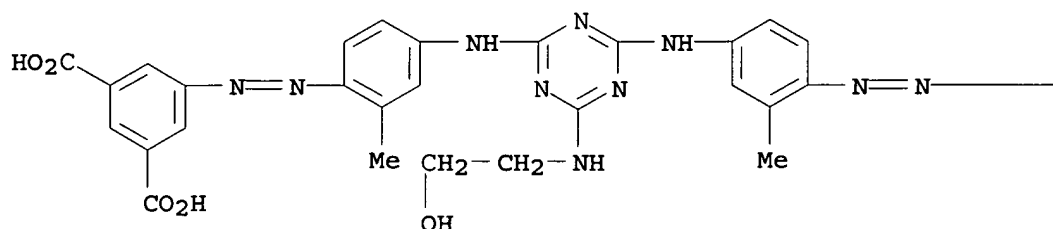


PAGE 2-A

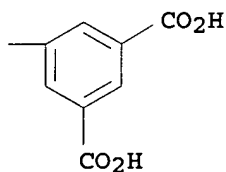


RN 163212-03-1 HCAPLUS
 CN 1,3-Benzenedicarboxylic acid, 5,5'-[[6-[(2-hydroxyethyl)amino]-1,3,5-triazine-2,4-diyl]bis[imino(2-methyl-4,1-phenylene)azo]]bis-(9CI) (CA INDEX NAME)

PAGE 1-A

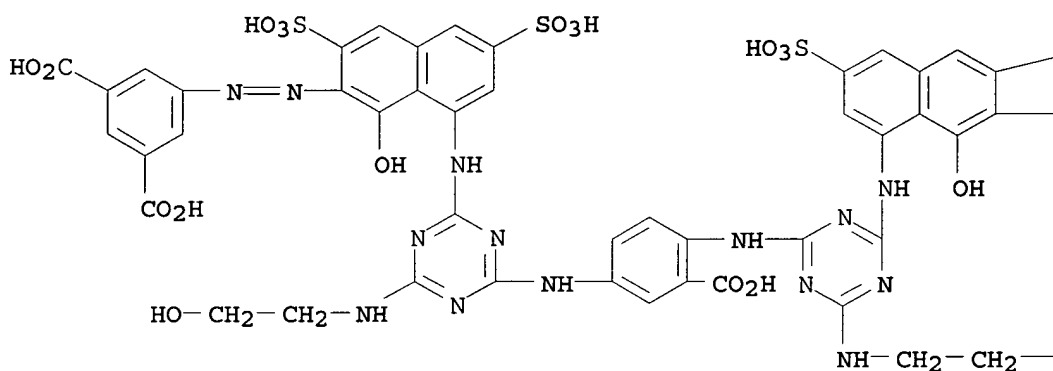


PAGE 1-B

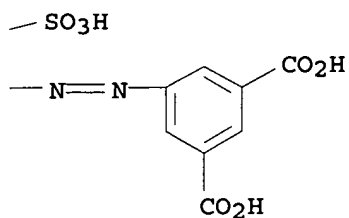


RN 163212-04-2 HCAPLUS
 CN 1,3-Benzenedicarboxylic acid, 5,5'-[(2-carboxy-1,4-phenylene)bis[imino[6-[(2-hydroxyethyl)amino]-1,3,5-triazine-4,2-diyl]imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediyl)azo]]bis-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



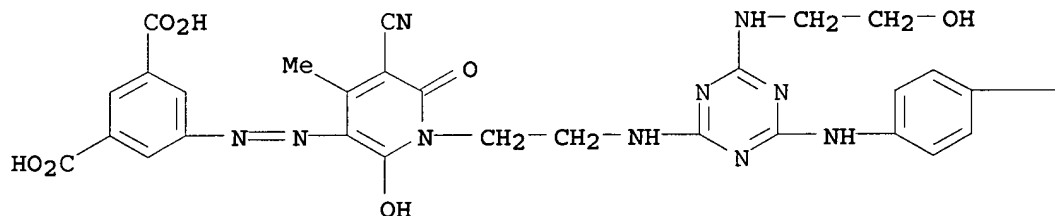
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RN 179629-44-8 HCAPLUS

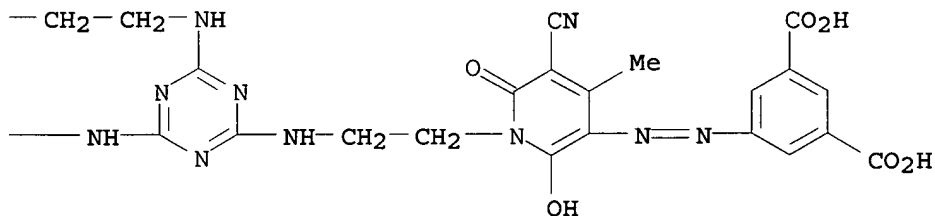
CN 1,3-Benzenedicarboxylic acid, 5,5'-[1,4-phenylenebis[imino[6-[(2-hydroxyethyl)amino]-1,3,5-triazine-4,2-diyl]imino-2,1-ethanediyl(5-cyano-2-hydroxy-4-methyl-6-oxo-1,3(6H)-pyridinediyl)azo]]bis-(9CI) (CA INDEX NAME)

PAGE 1-A

HO—



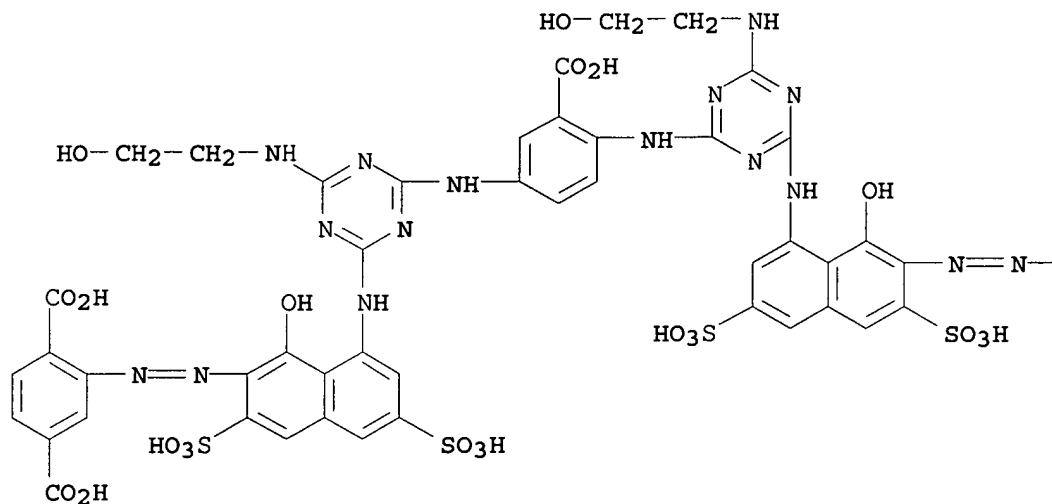
PAGE 1-B



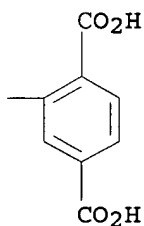
RN 209005-08-3 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, 2,2'-[(2-carboxy-1,4-phenylene)bis[imino[6-[(2-hydroxyethyl)amino]-1,3,5-triazine-4,2-diyl]imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediyl)azo]]bis-(9CI) (CA INDEX NAME)

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PAGE 1-B



- IC ICM C09D011-00
ICS B41J002-01
- CC 42-12 (Coatings, Inks, and Related Products)
Section cross-reference(s): 41
- ST **jet printing ink set dye; carbon**
black jet printing ink set
- IT Dyes
Ink-jet printers
(ink-jet ink set and recording
and recording apparatus using the same for color images with no
bleeding between black and color inks and giving
black images with good water and light resistance)
- IT Polyolefins
Polyurethanes, uses
(ink-jet ink set and recording
and recording apparatus using the same for color images with no
bleeding between black and color inks and giving
black images with good water and light resistance)

- IT Carbon black, uses
(**ink-jet ink** set and recording
and recording apparatus using the same for color images with no
bleeding between black and color **inks** and giving
black images with good water and light resistance)
- IT **Inks**
(**jet-printing; ink-jet**
ink set and recording and recording apparatus using the same
for color images with no bleeding between black and color
inks and giving black images with good water and light
resistance)
- IT 57419-34-8P, 4-Aminophenacylpyridinium chloride
(**ink-jet ink** set and recording
and recording apparatus using the same for color images with no
bleeding between black and color **inks** and giving
black images with good water and light resistance)
- IT 9003-11-6, Pepol AS-053X 9014-85-1, Acetylenol EH
(**ink-jet ink** set and recording
and recording apparatus using the same for color images with no
bleeding between black and color **inks** and giving
black images with good water and light resistance)
- IT 9003-20-7, Poly(vinyl acetate) 9004-34-6, Cellulose, uses
(**ink-jet ink** set and recording
and recording apparatus using the same for color images with no
bleeding between black and color **inks** and giving
black images with good water and light resistance)
- IT 110-86-1, Pyridine, reactions 140-49-8, 4-Acetamidophenacyl
chloride 62654-12-0
(**ink-jet ink** set and recording
and recording apparatus using the same for color images with no
bleeding between black and color **inks** and giving
black images with good water and light resistance)
- IT 147-14-8D, sulfonated, triazinetriamine group-containing
1934-21-0, C.I. Acid Yellow 23 3520-42-1, C.I. Acid Red 52
12222-04-7, C.I. Direct Blue 199 163212-03-1
163212-04-2 179629-44-8 209005-08-3
(**ink-jet ink** set and recording
and recording apparatus using the same for color images with no
bleeding between black and color **inks** and giving
black images with good water and light resistance)

L62 ANSWER 30 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:334797 HCAPLUS

DOCUMENT NUMBER: 129:68957

TITLE: **Ink-jet ink** sets
and recording and recording devices using the
same for color images using two or more
colored **inks** including black
ink

INVENTOR(S): Teraoka, Wataru; Kazuraki, Takashi; Oosumi,
Koichi; Takizawa, Yoshihisa; Hattori,
Yoshifumi; Noguchi, Hiromichi

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10140063	A2	19980526	JP 1996-315674	1996 1113
PRIORITY APPLN. INFO.:			JP 1996-315674	1996 1113

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT
*

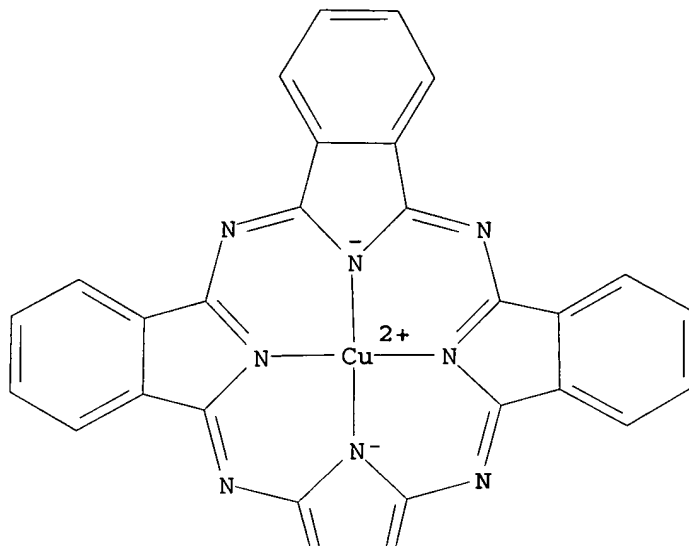
AB The title sets contain a black ink containing self-dispersing carbon black bonded with hydrophilic surface groups directly or via a group of atoms and cationic or nonionic surfactants and color ink(s) containing surfactants and colorants of opposite polarity to that of the black ink. An ink set comprises a black ink containing p-N.tplbond.N+C6H4N+Me3-treated carbon black, glycerin, ethylene glycol, trimethylolpropane, poly(allylamine) acetate, and water; a yellow ink containing I, 2-pyrrolidone, ε-caprolactam, hexylene glycol, Acetylenol EH and water; a magenta ink containing II, triethylene glycol, sulfolane, butylene glycol, Acetylenol EH, and water; and a cyan ink containing III (Pc = phthalocyanine), propylene glycol, ethylene glycol, 2-pyrrolidone, Acetylenol EH, and water.

IT 147-14-8D, sulfonated and carboxylated triazinylsulfonamido derivs. 163212-03-1
163212-04-2 209005-08-3
(ink-jet ink sets and recording and recording devices using the same for color images using two or more colored inks including black ink)

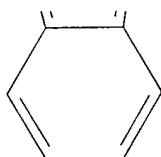
RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,κN32]-, (SP-4-1)-(9CI)
(CA INDEX NAME)

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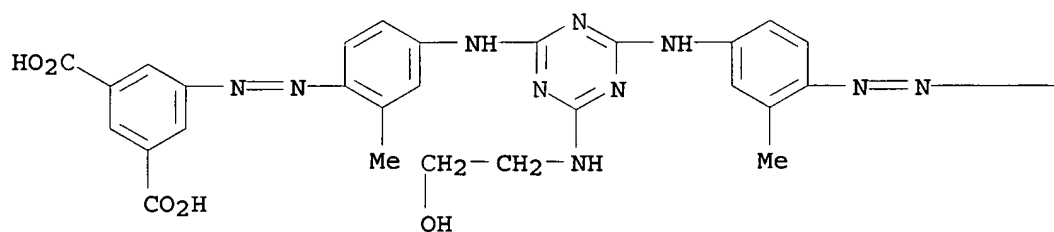


PAGE 2-A

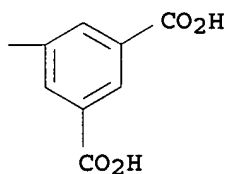


RN 163212-03-1 HCAPLUS
 CN 1,3-Benzenedicarboxylic acid, 5,5'-[[6-[(2-hydroxyethyl)amino]-1,3,5-triazine-2,4-diyl]bis[imino(2-methyl-4,1-phenylene)azo]]bis-(9CI) (CA INDEX NAME)

PAGE 1-A

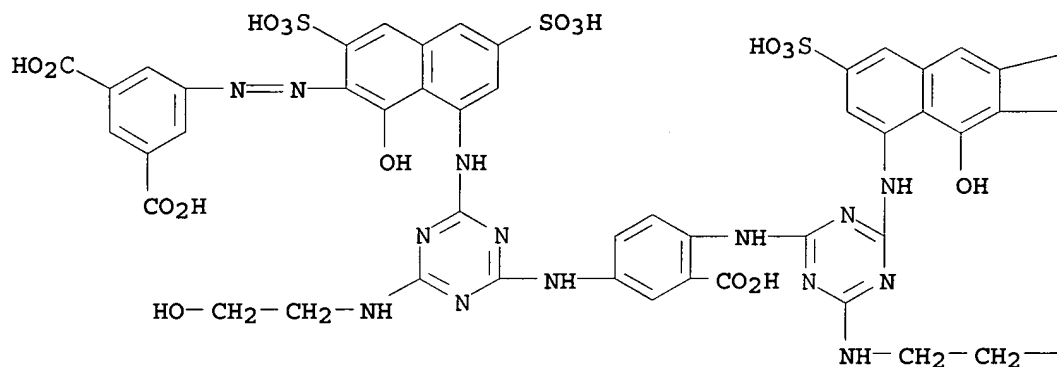


PAGE 1-B

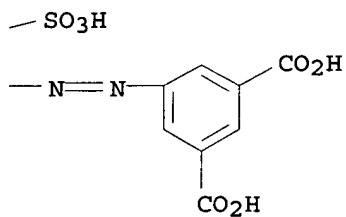


RN 163212-04-2 HCAPLUS
 CN 1,3-Benzenedicarboxylic acid, 5,5'-[(2-carboxy-1,4-phenylene)bis[imino[6-[(2-hydroxyethyl)amino]-1,3,5-triazine-4,2-diyl]imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediyl)azo]]bis-(9CI) (CA INDEX NAME)

PAGE 1-A



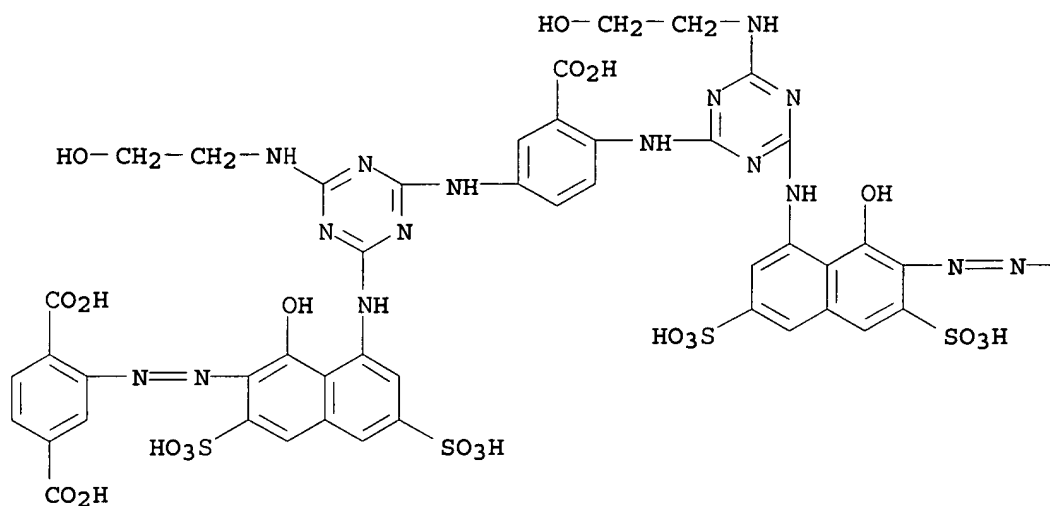
PAGE 1-B



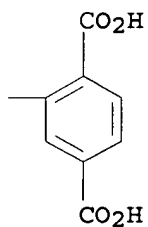
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RN 209005-08-3 HCAPLUS
 CN 1,4-Benzenedicarboxylic acid, 2,2'-[(2-carboxy-1,4-phenylene)bis[imino[6-[(2-hydroxyethyl)amino]-1,3,5-triazine-4,2-diyl]imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediyl)azo]]bis-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



- IC ICM C09D011-00
ICS B41J002-01
- CC 42-12 (Coatings, Inks, and Related Products)
- ST **jet ink set color printing;**
surfactant **jet ink set**
- IT Quaternary ammonium compounds, uses
(alkylbenzyltrimethyl, chlorides; **ink-jet**
ink sets and recording and recording devices using the
same for color images using two or more colored **inks**
including black **ink**)
- IT Carbon black, reactions
(cationic; **ink-jet ink sets** and
recording and recording devices using the same for color images
using two or more colored **inks** including black
ink)
- IT Dyes
(**ink-jet ink sets** and recording)

and recording devices using the same for color images using two or more colored inks including black ink)

IT Inks

(jet-printing; ink-jet ink sets and recording and recording devices using the same for color images using two or more colored inks including black ink)

IT 57419-34-8P 132779-03-4P

(ink-jet ink sets and recording and recording devices using the same for color images using two or more colored inks including black ink)

IT 9014-85-1, Acetylenol EH 147264-27-5

(ink-jet ink sets and recording and recording devices using the same for color images using two or more colored inks including black ink)

IT 110-86-1, Pyridine, reactions 140-49-8, 4-Acetamidophenacyl chloride 62654-12-0

(ink-jet ink sets and recording and recording devices using the same for color images using two or more colored inks including black ink)

IT 147-14-8D, sulfonated and carboxylated triazinylsulfonamido derivs. 163212-03-1

163212-04-2 209005-08-3

(ink-jet ink sets and recording and recording devices using the same for color images using two or more colored inks including black ink)

L62 ANSWER 31 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:809778 HCAPLUS

DOCUMENT NUMBER: 128:76687

TITLE: Organic pigment compositions

INVENTOR(S): Badejo, Ibraheem T.; Rice, Daphne J.

PATENT ASSIGNEE(S): Bayer Corp., USA

SOURCE: U.S., 10 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
US 5698024	A	19971216	US 1996-777102	1996 1231
CA 2224618	AA	19980630	CA 1997-2224618	1997 1211
EP 851007	A1	19980701	EP 1997-122502	1997 1219
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 10195329	A2	19980728	JP 1997-369330	1997 1230
PRIORITY APPLN. INFO.:			US 1996-777102	A 1996 1231

OTHER SOURCE(S): MARPAT 128:76687

AB Pigment compns. comprise an organic pigment treated with .apprx.0.1 to .apprx.20% compound having the formula $Q[CH_2NHCXZ]_n$, wherein Q represents an organic pigment moiety, X is O or S, Z represents a heteroarom. group attached at a ring carbon atom to the (thio)amidomethyl $-CH_2NHCX-$ linking group, and n is 1-4. Thus, 2,9-dimethylquinacridone (I) was dry-blended with 10% nicotinamidomethylquinacridone (II), and a water-based paint containing the pigment exhibited a reduced viscosity and bluer tint compared to a paint containing I and no II.

IT 200723-53-1, Arolon 559G4-70-Cymel 325 copolymer
(coatings containing pigments treated with
heteroaryl(thio)amidomethyl derivs. of pigments)

RN 200723-53-1 HCAPLUS

CN Formaldehyde, polymer with Arolon 559G4-70 and
1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 200645-04-1

CMF Unspecified

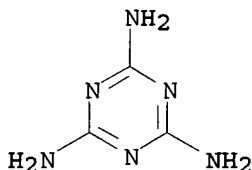
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 108-78-1

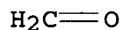
CMF C3 H6 N6



CM 3

CRN 50-00-0

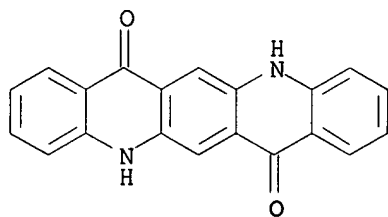
CMF C H2 O



IT 1047-16-1, Quinacridone
(reaction with hydroxymethylnicotinamide)

RN 1047-16-1 HCAPLUS

CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
(CA INDEX NAME)



IC ICM C09B048-00

INCL 106495000

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 41

IT Inks

(inks containing pigments treated with heteroaryl(thio)amidomethyl derivs. of pigments)

IT 200723-53-1, Arolon 559G4-70-Cymel 325 copolymer

(coatings containing pigments treated with heteroaryl(thio)amidomethyl derivs. of pigments)

IT 1047-16-1, Quinacridone

(reaction with hydroxymethylnicotinamide)

L62 ANSWER 32 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:805589 HCAPLUS

DOCUMENT NUMBER: 128:103493

TITLE: Color filters, manufacture thereof, and liquid crystal display using the same

INVENTOR(S): Enokimoto, Kazuhiro; Izumi, Yoshihiro; Kan, Reigen

PATENT ASSIGNEE(S): Sharp Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
JP 09318812	A2	19971212	JP 1997-25663	1997 0207
JP 3394148	B2	20030407		
US 5908721	A	19990601	US 1997-797815	1997 0207
PRIORITY APPLN. INFO.:			JP 1996-24485	A 1996 0209
			JP 1996-68802	A 1996 0325
			JP 1996-68803	A 1996 0325

JP 1996-68804 A
1996
0325

JP 1996-68806 A
1996
0325

AB The title color filters contain pixels and light-shielding colored layers formed by **hydrophilic** light-shielding colored **inks** on a transparent substrate, wherein the **inks** contain resins having partial structure -CO₂- N+R₁R₂R₃R₄ [R₁-4 = H, (un)substituted C₁-12 alkyl, C₂-8 alkenyl], e.g., methacrylic acid- α -methylstyrene copolymer monoethanolamine salt.

IT 9003-08-1
(Sumitex M 3; color filters, manufacture thereof, and liquid crystal display using the same)

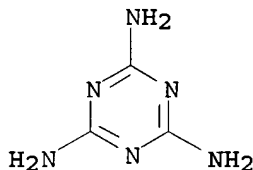
RN 9003-08-1 HCAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI)
(CA INDEX NAME)

CM 1

CRN 108-78-1

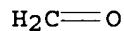
CMF C3 H6 N6



CM 2

CRN 50-00-0

CMF C H2 O

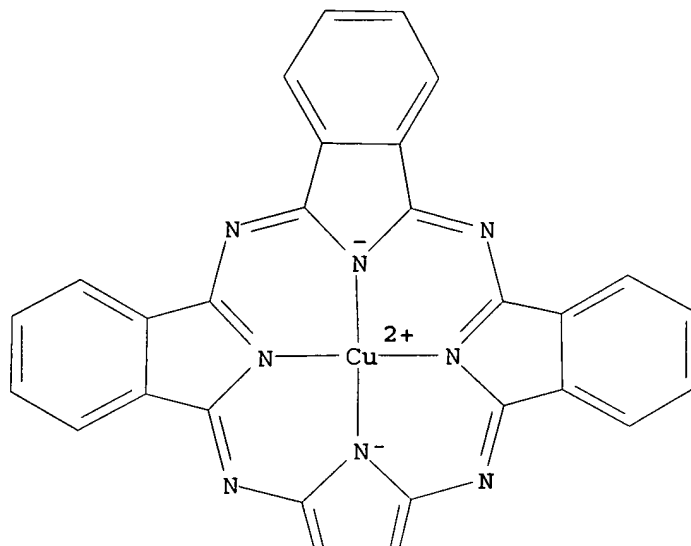


IT 147-14-8, C.I. Pigment Blue 15
(color filters, manufacture thereof, and liquid crystal display using the same)

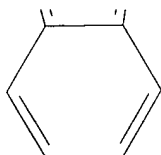
RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-
 κ N29, κ N30, κ N31, κ N32]-, (SP-4-1)- (9CI)
(CA INDEX NAME)

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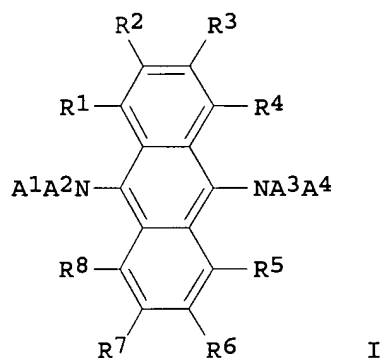
IC ICM G02B005-20
 ICS C09D011-00; G02F001-1335
 CC 42-13 (Coatings, Inks, and Related Products)
 ST color filter liq crystal display; light shielding ink
 color filter; quaternary ammonium group contg polymer binder
 IT 9003-08-1
 (Sumitex M 3; color filters, manufacture thereof, and liquid crystal display using the same)
 IT 147-14-8, C.I. Pigment Blue 15 1064-48-8 4051-63-2,
 C.I. Pigment Red 177 6428-31-5, C.I. Direct Black 19
 8005-03-6, C.I. Acid Black 2 9002-89-5, Poly(vinyl alcohol)
 9003-06-9, Acrylamide-acrylic acid copolymer 14302-13-7, C.I.
 Pigment Green 36 86091-10-3, PS 076 201057-14-9 201057-15-0
 201363-86-2, C.I. Acid Black 33
 (color filters, manufacture thereof, and liquid crystal display using the same)

L62 ANSWER 33 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1997:543038 HCAPLUS
 DOCUMENT NUMBER: 127:235680

TITLE: Anthracene-type fluorescent colorants for plastic moldings, coatings, and **inks**
 INVENTOR(S): Tamano, Michiko; Enokida, Toshio
 PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09208845	A2	19970812	JP 1996-18496	1996 0205
PRIORITY APPLN. INFO.:			JP 1996-18496	1996 0205

OTHER SOURCE(S): MARPAT 127:235680
 GI



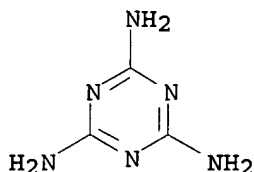
- AB Title colorants I [A1-A4 = (substituted) C6-16 aryl; R1-R8 = H, halo, (substituted) alkyl, (substituted) alkoxy, (substituted) aryl, (substituted) **amino**], which are (1) dispersed in plastic moldings or (2) contained in binders of coatings or **inks**, show improved light, heat, and solvent resistance. Thus, 10 parts anthraquinone and 35 parts diphenylamine were reacted in PhH in the presence of pyridine and TiCl₄ at room temperature for 20 h to give title colorant, 30 parts of which was mixed with 30 parts Sumikathene G 808 (polyethylene) and 40 parts Sanwax 131P (polyethylene wax) to give a master batch. Then, 100 parts Hizex 2208 (high-d. polyethylene) was mixed with 4 parts of the master batch and extrusion-molded to give a test piece showing no discoloration after 100-h exposure to sunshine weather meter.
- IT 9003-08-1DP, Formaldehyde-melamine copolymer, reaction products with alkyd resins
 (anthracene-type fluorescent colorants for plastic moldings, coatings, and **inks** with improved weatherability)

RN 9003-08-1 HCAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI)
 (CA INDEX NAME)

CM 1

CRN 108-78-1

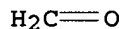
CMF C3 H6 N6



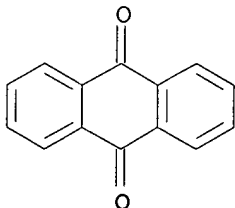
CM 2

CRN 50-00-0

CMF C H2 O



IT 84-65-1, Anthraquinone
 (light-resistant anthracene-type fluorescent colorants from)
 RN 84-65-1 HCAPLUS
 CN 9,10-Anthracenedione (9CI) (CA INDEX NAME)



IC ICM C09B057-00
 ICS C08K005-16; C08L101-00; C09D005-22; C09D011-00
 CC 41-10 (Dyes, Organic Pigments, Fluorescent Brighteners, and
 Photographic Sensitizers)
 Section cross-reference(s): 37, 42
 ST anthracene fluorescent colorant light resistance; heat solvent
 resistance fluorescent colorant; plastic molding fluorescent
 colorant; coating fluorescent colorant; **ink** fluorescent
 colorant; anthraquinone diphenylamine adduct fluorescent colorant;
 polyethylene molding fluorescent colorant weatherability
 IT Aromatic oils (hydrocarbons)
 (Shellsol AB, matrix; anthracene-type fluorescent colorants for
 plastic moldings, coatings, and **inks** with improved
 weatherability)
 IT Fluorescent dyes
 Heat-resistant materials

- Light-resistant materials
(anthracene-type fluorescent colorants for plastic moldings, coatings, and **inks** with improved weatherability)
- IT **Inks**
(gravure; anthracene-type fluorescent colorants for plastic moldings, coatings, and **inks** with improved weatherability)
- IT Coating materials
Coating materials
(light-resistant; anthracene-type fluorescent colorants for plastic moldings, coatings, and **inks** with improved weatherability)
- IT Rosin
(phenolic resins, **ink** varnishes; anthracene-type fluorescent colorants for plastic moldings, coatings, and **inks** with improved weatherability)
- IT Alkyd resins
(polymers with melamine resins; anthracene-type fluorescent colorants for plastic moldings, coatings, and **inks** with improved weatherability)
- IT **Inks**
(**printing**; anthracene-type fluorescent colorants for plastic moldings, coatings, and **inks** with improved weatherability)
- IT **Aminoplasts**
(reaction products with alkyd resins; anthracene-type fluorescent colorants for plastic moldings, coatings, and **inks** with improved weatherability)
- IT 9002-88-4, Polyethylene
(Hizex 2208; anthracene-type fluorescent colorants for plastic moldings, coatings, and **inks** with improved weatherability)
- IT 79-10-7DP, Acrylic acid, polymers with styrene and other monomers
100-42-5DP, Styrene, polymers with acrylic acid and other monomers
9003-08-1DP, Formaldehyde-melamine copolymer, reaction products with alkyd resins 9017-37-2P, Divinylbenzene-methyl methacrylate copolymer
(anthracene-type fluorescent colorants for plastic moldings, coatings, and **inks** with improved weatherability)
- IT 9002-86-2, PVC 9003-56-9, Kralastic MH
(anthracene-type fluorescent colorants for plastic moldings, coatings, and **inks** with improved weatherability)
- IT 177799-11-0P 177799-12-1P 177799-13-2P 177799-15-4P
177799-16-5P
(colorants; anthracene-type fluorescent colorants for plastic moldings, coatings, and **inks** with improved weatherability)
- IT 84-65-1, Anthraquinone 90-30-2, 1-Naphthyl(phenyl)amine
101-67-7, Bis(p-octylphenyl)amine 122-39-4, Diphenylamine, reactions 523-27-3, 9,10-Dibromoanthracene 620-93-9
10081-67-1 41317-15-1 113705-11-6, 9,10-Diiodoanthracene
(light-resistant anthracene-type fluorescent colorants from)

L62 ANSWER 34 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:467346 HCAPLUS

DOCUMENT NUMBER: 127:96618

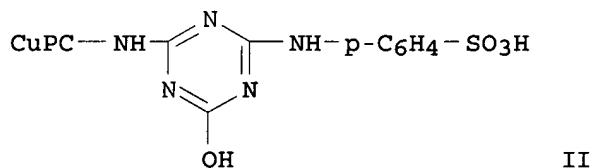
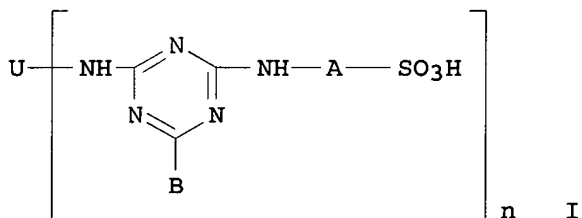
TITLE: Pigment dispersants for nonaqueous systems for coatings with excellent brightness and high gloss

INVENTOR(S): Kitamura, Kunji; Miki, Toshiyuki

PATENT ASSIGNEE(S): Sanyo Color Works, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 09122470	A2	19970513	JP 1995-315750	1995 1028
PRIORITY APPLN. INFO.:			JP 1995-315750	1995 1028

OTHER SOURCE(S): MARPAT 127:96618
 GI



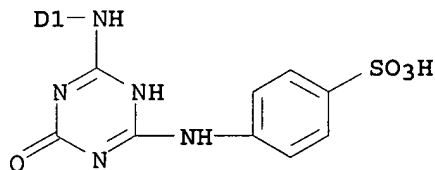
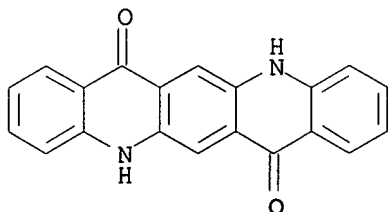
AB The title dispersants are I or metal or ammonium or amine salts thereof [U = organic dye residues excluding azo dye residues, A = (un)substituted ethylene, phenylene, naphthylene; B = OH, NHASO₃H; n = 1-2]. A pigment composition comprised C.I. Pigment Blue 15 9, II (PC = phthalocyanine) 1, one-liquid urethane varnish 45, and 40:20:40 toluene-isopropanol-MEK 45 parts.

IT 191880-52-1P 191880-54-3P 191880-55-4P
 191880-56-5P 191880-57-6P 191880-58-7P
 191880-59-8P 191880-60-1P 191880-62-3P
 191880-65-6P 191880-66-7P 191880-67-8P
 191942-63-9P

(pigment dispersant; pigment dispersants for nonaq. systems for coatings with excellent brightness and high gloss)

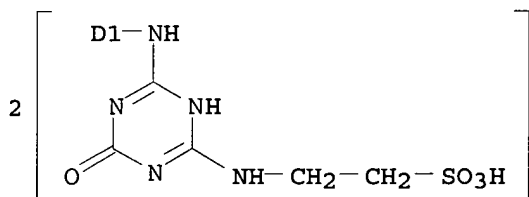
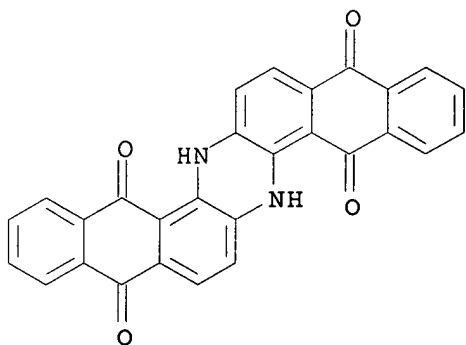
RN 191880-52-1 HCAPLUS

CN Benzenesulfonic acid, 4-[[1,4-dihydro-4-oxo-6-[(5,7,12,14-tetrahydro-7,14-dioxoquino[2,3-b]acridinyl)amino]-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



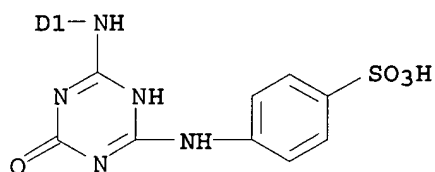
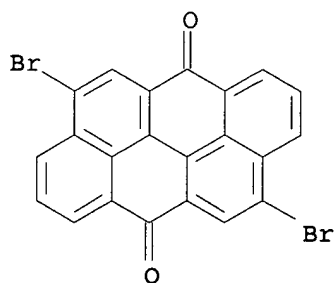
RN 191880-54-3 HCAPLUS

CN Ethanesulfonic acid, 2,2'-[(5,6,9,14,15,18-hexahydro-5,9,14,18-tetraoxoanthrazinediyl)bis[imino(1,6-dihydro-6-oxo-1,3,5-triazine-4,2-diyl)imino]]bis- (9CI) (CA INDEX NAME)



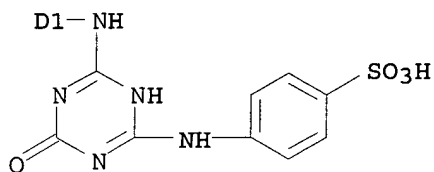
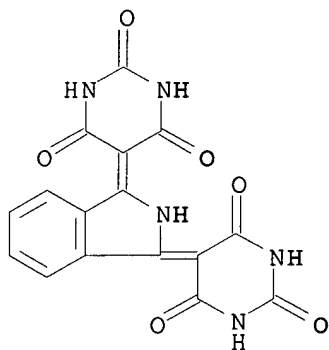
RN 191880-55-4 HCAPLUS

CN Benzenesulfonic acid, 4-[[6-[(4,10-dibromo-6,12-dihydro-6,12-dioxodibenzo[def,mno]chrysenyl)amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



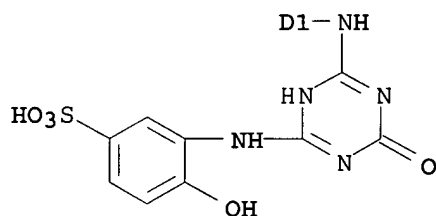
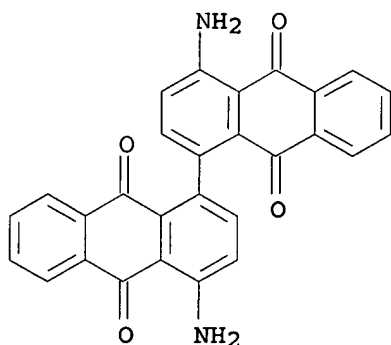
RN 191880-56-5 HCAPLUS

CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5,5'-(1H-isoindole-1,3(2H)-diylidene)bis-, mono[[1,4-dihydro-4-oxo-6-[(4-sulfophenyl)amino]-1,3,5-triazin-2-yl]amino] deriv. (9CI) (CA INDEX NAME)



RN 191880-57-6 HCAPLUS

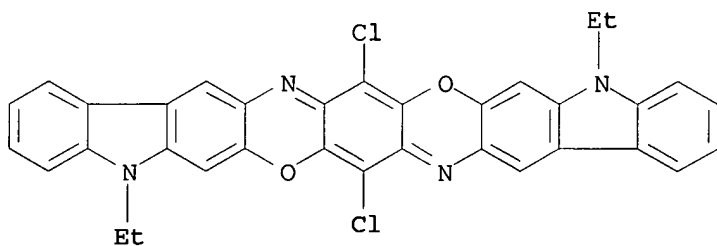
CN Benzenesulfonic acid, 4-[[6-[(4,4'-diamino-9,9',10,10'-tetrahydro-9,9',10,10'-tetraoxo[1,1'-bianthracen]yl)amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]-4-hydroxy- (9CI) (CA INDEX NAME)



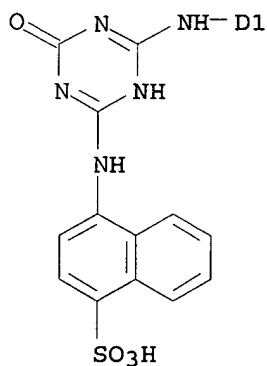
RN 191880-58-7 HCAPLUS

CN 1-Naphthalenesulfonic acid, 4-[[6-[(8,18-dichloro-5,15-diethyl-5,15-dihydrodiindolo[3,2-b:3',2'-m]triphenodioxazinyl)amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

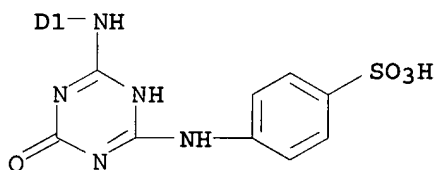
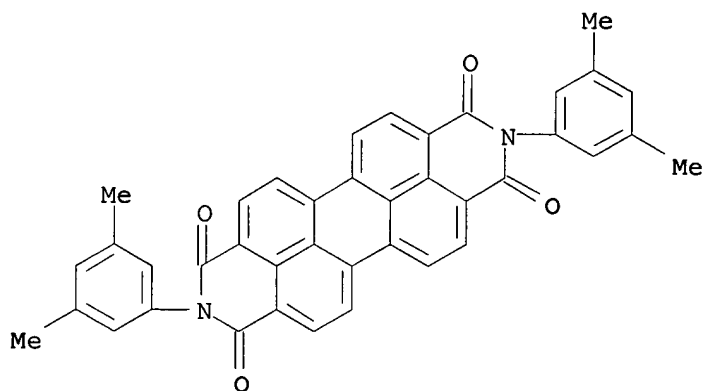
PAGE 1-A



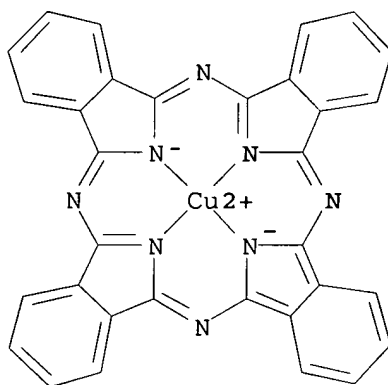
PAGE 2-A



- RN 191880-59-8 HCAPLUS
 CN Benzenesulfonic acid, 4-[[6-[[2,9-bis(3,5-dimethylphenyl)-1,2,3,8,9,10-hexahydro-1,3,8,10-tetraoxoanthra[2,1,9-def:6,5,10-d'e'f']diisoquinolinyl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

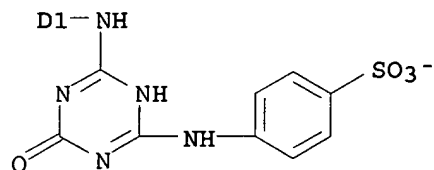


- RN 191880-60-1 HCAPLUS
 CN Cuprate(1-), [4-[[[1,4-dihydro-4-oxo-6-[(29H,31H-phthalocyanin-C-yl-κN29,κN30,κN31,κN32)amino]-1,3,5-triazin-2-yl]amino]benzenesulfonato(3-)]-, hydrogen (9CI) (CA INDEX NAME)

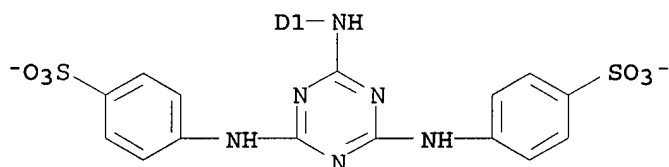
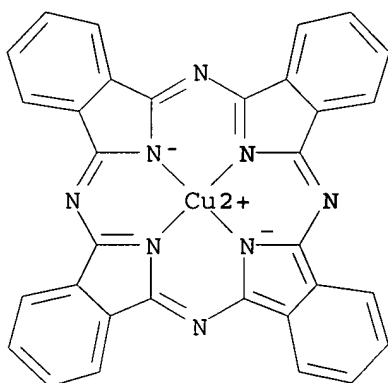


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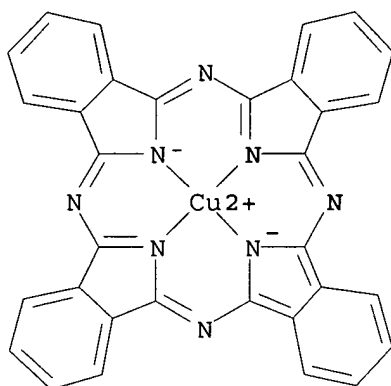


RN 191880-62-3 HCAPLUS
 CN Cuprate(2-), [[4,4'-[[6-[(29H,31H-phthalocyanin-C-yl-
 κN29,κN30,κN31,κN32)amino]-1,3,5-triazine-
 2,4-diyl]diimino]bis[benzenesulfonato]](4-)]-, dihydrogen (9CI)
 (CA INDEX NAME)



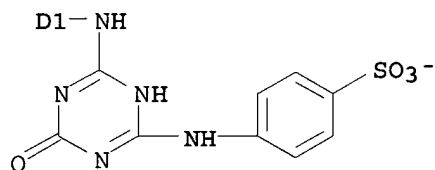
RN 191880-65-6 HCAPLUS
 CN Cuprate(1-), [4-[[1,4-dihydro-4-oxo-6-[(C,C,C-trichloro-29H,31H-
 phthalocyanin-C-yl-κN29,κN30,κN31,κN32)ami
 no]-1,3,5-triazin-2-yl]amino]benzenesulfonato(3-)]-, hydrogen
 (9CI) (CA INDEX NAME)

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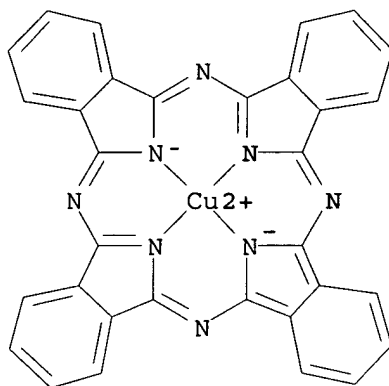
3 (D1-C1)

PAGE 2-A

● H⁺

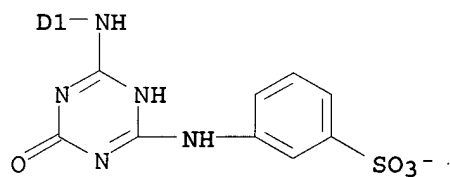
RN 191880-66-7 HCAPLUS
 CN Cuprate(1-), [3-[[6-[(C,C,C,C,C,C-hexachloro-29H,31H-phthalocyanin-C-yl-κN29,κN30,κN31,κN32)amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]benzenesulfonato(3-)]-, barium (2:1) (9CI) (CA INDEX NAME)

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6 (D1-C1)

PAGE 2-A

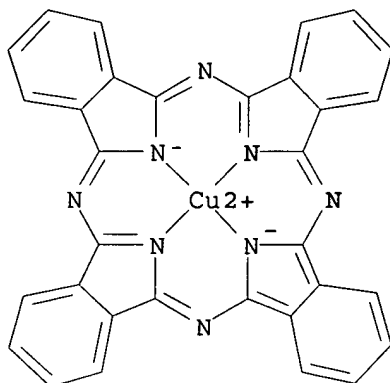
●1/2 Ba²⁺

RN 191880-67-8 HCAPLUS
 CN Cuprate(1-), [4-[[1,4-dihydro-4-oxo-6-[(29H,31H-phthalocyanin-C-yl-
 κN29,κN30,κN31,κN32)amino]-1,3,5-triazin-2-
 yl]amino]benzenesulfonato(3-)]-, hydrogen, compd. with
 1-octadecanamine (1:1) (9CI) (CA INDEX NAME)

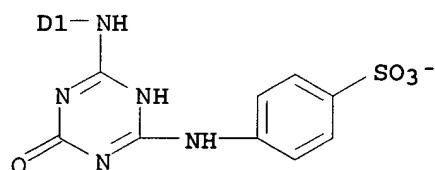
CM 1

CRN 191880-60-1
 CMF C41 H22 Cu N13 O4 S . H
 CCI CCS, IDS

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PAGE 2-A



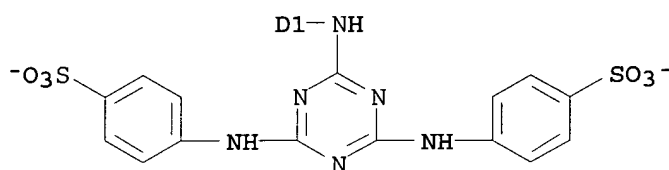
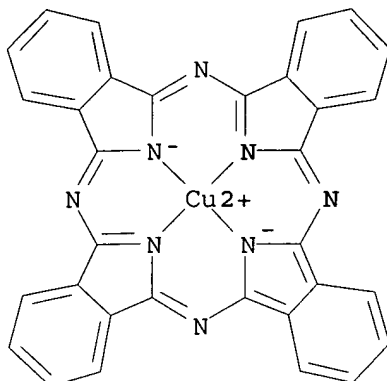
CM 2

CRN 124-30-1
CMF C18 H39 N

H₂N⁻ (CH₂)₁₇-Me

RN 191942-63-9 HCAPLUS
CN Cuprate(2-), [[4,4'-[[6-[(29H,31H-phthalocyanin-C-yl-
κN29,κN30,κN31,κN32)amino]-1,3,5-triazine-
2,4-diyl]diimino]bis[benzenesulfonato]](4-)]-, calcium (1:1) (9CI)
(CA INDEX NAME)

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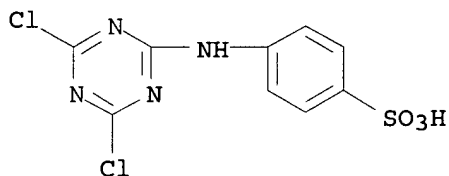
● Ca²⁺

IT 16110-89-7P 191880-61-2P

(pigment dispersants for nonaq. systems for coatings with excellent brightness and high gloss)

RN 16110-89-7 HCAPLUS

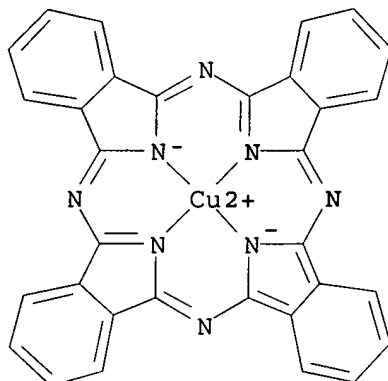
CN Benzenesulfonic acid, 4-[(4,6-dichloro-1,3,5-triazin-2-yl)amino]-(9CI) (CA INDEX NAME)



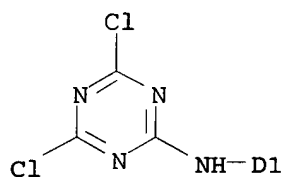
RN 191880-61-2 HCAPLUS

CN Copper, [N-(4,6-dichloro-1,3,5-triazin-2-yl)-29H,31H-phthalocyanin-C-aminato(2-)-κN29,κN30,κN31,κN32]-(9CI)
(CA INDEX NAME)

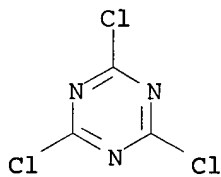
PAGE 1-A



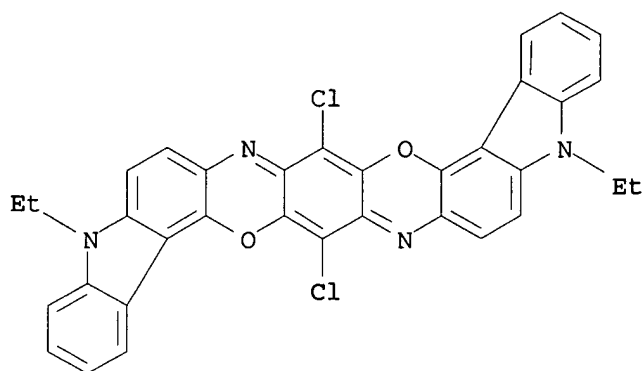
PAGE 2-A



IT 108-77-0, Cyanuric chloride 215247-95-3, C.I.
 Pigment Violet 23
 (pigment dispersants for nonaq. systems for coatings with
 excellent brightness and high gloss)
 RN 108-77-0 HCAPLUS
 CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)



RN 215247-95-3 HCAPLUS
 CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-
 diethyl-5,15-dihydro- (9CI) (CA INDEX NAME)



- IC ICM B01F017-16
ICS B01F017-12; B01F017-32; C09B067-20
- CC 42-6 (Coatings, Inks, and Related Products)
- IT Coating materials
Dispersing agents
Inks
Optical filters
Pigments, nonbiological
(pigment dispersants for nonaq. systems for coatings with excellent brightness and high gloss)
- IT 191880-52-1P 191880-54-3P 191880-55-4P
191880-56-5P 191880-57-6P 191880-58-7P
191880-59-8P 191880-60-1P 191880-62-3P
191880-65-6P 191880-66-7P 191880-67-8P
191942-63-9P
(pigment dispersant; pigment dispersants for nonaq. systems for coatings with excellent brightness and high gloss)
- IT 16110-89-7P 26522-10-1P, Copper
monoaminophthalocyanine 191880-61-2P
191880-63-4P
(pigment dispersants for nonaq. systems for coatings with excellent brightness and high gloss)
- IT 84-86-6, Naphthionic acid 98-37-3, 2-Aminophenol
-4-sulfonic acid 107-35-7, Taurine 108-77-0, Cyanuric
chloride 121-57-3, Sulfanilic acid 124-30-1, 1-Octadecanamine
4051-63-2, C.I. Pigment Red 177 4378-61-4, C.I. Pigment Red 168
4948-15-6, C.I. Pigment Red 149 10039-54-0, Hydroxylamine
sulfate 29719-96-8 36888-99-0, Pigment Yellow 139
191880-51-0 191880-53-2 191880-64-5 215247-95-3,
C.I. Pigment Violet 23
(pigment dispersants for nonaq. systems for coatings with excellent brightness and high gloss)

L62 ANSWER 35 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:281065 HCAPLUS

DOCUMENT NUMBER: 126:265228

TITLE: Aqueous dye-terminated urethane- or acrylic
polymeric pigment-dispersing agent for aqueous
printing inks or paints, and
pigment dispersion composition therefrom

INVENTOR(S): Tadashi, Itabashi; Takashi, Kamikubo;
Katsuhiko, Sawamura

PATENT ASSIGNEE(S): Toyo Ink Manufacturing Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 30 pp.

DOCUMENT TYPE: CODEN: EPXXDW
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: English
 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 763580	A2	19970319	EP 1996-114489	1996 0910
EP 763580	A3	20010228		
EP 763580	B1	20030813		
R: DE, GB				
JP 09077986	A2	19970325	JP 1995-232167	1995 0911
JP 09077988	A2	19970325	JP 1995-232169	1995 0911
JP 3397014	B2	20030414		
JP 09077991	A2	19970325	JP 1995-238162	1995 0918
JP 3397017	B2	20030414		
JP 09077993	A2	19970325	JP 1995-238164	1995 0918
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JP 09077985	A2	19970325	JP 1995-238168	1995 0918
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US 5854323	A	19981229	US 1996-712452	1996 0911
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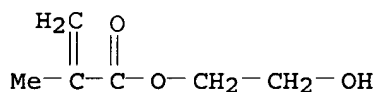
AB **Aqueous pigment-dispersion composition for inks**
or paints, having improved dispersibility of pigment and adaptability, comprises a pigment-dispersing agent containing an aqueous linear urethane or acrylic polymer terminated with an organic dye, anthraquinone or acridone, a pigment and, optionally, an aqueous resin. Thus, phthalocyanine-terminated polyurethane pigment dispersing agent (prepared from dimethylolpropionic acid, polypropylene glycol, isophorone diisocyanate, isophorone diamine and copper phthalocyanine carboxylic acid) 1, **pigment 5**, **water** soluble acrylic resin (acrylic acid-2-hydroxyethyl methacrylate-Et methacrylate-Me methacrylate-vinyl acetate copolymer) 13 and melamine resin (Cymel 303) 6 parts, were blended to give a paint which was applied onto a PET film and baked at 140° for 30 min showing gloss (20° angel) 77.5%, compared to 34.0 for a sample without pigment dispersing agent.

IT **188679-56-3**
(paint; aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aqueous **printing inks** or paints)

RN 188679-56-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with ethenyl acetate, formaldehyde, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 2-propenoic acid and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

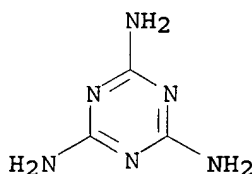
CM 1

CRN 868-77-9
CMF C6 H10 O3



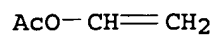
CM 2

CRN 108-78-1
CMF C3 H6 N6



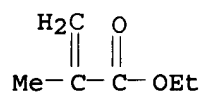
CM 3

CRN 108-05-4
CMF C4 H6 O2



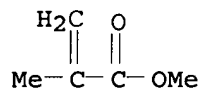
CM 4

CRN 97-63-2
CMF C6 H10 O2



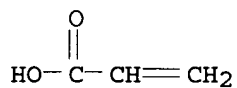
CM 5

CRN 80-62-6
CMF C5 H8 O2



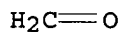
CM 6

CRN 79-10-7
CMF C3 H4 O2



CM 7

CRN 50-00-0
CMF C H2 O

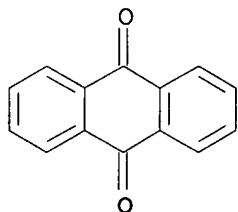


IT 84-65-1DP, Anthraquinone, derivs., reaction product with amine-terminated urethane or acrylic polymer 1047-16-1DP, Quinacridone, derivs., reaction product with amine-terminated urethane or acrylic polymer

(pigment-dispersing agent; aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aqueous printing inks or paints)

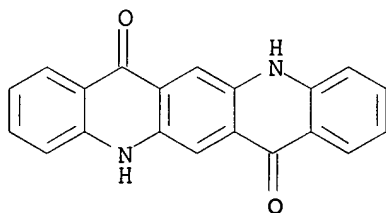
RN 84-65-1 HCAPLUS

CN 9,10-Anthracenedione (9CI) (CA INDEX NAME)



RN 1047-16-1 HCAPLUS

CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
(CA INDEX NAME)



IC ICM C09D017-00

ICS C09B067-00

CC 42-5 (Coatings, Inks, and Related Products)

ST dye terminated polyurethane aq dispersing agent; acrylic polymer dispersing agent ink paint; anthraquinone terminated prepn polyurethane pigment dispersant; acridone terminated urethane acrylic polymer dispersion; phthalocyanine terminated polyurethane acrylic paint; pigment dispersant aq ink paint

IT Alkyd resins

Epoxy resins, uses

Polyesters, uses

(aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for printing inks or paints, and pigment dispersion composition therefrom)

IT Acrylic polymers, uses

Polyurethanes, uses

(dye-terminated, pigment-dispersing agent; aq . dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for printing inks or paints)

IT Paints

(latex; aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aqueous printing inks or paints)

IT Chain transfer agents

(mercapto compds.; for preparation of aqueous dye-terminated urethane-

- or acrylic polymeric pigment-dispersing agent for **printing inks** or paints)
- IT Dispersing agents
(pigment, dye-terminated urethane- or acrylic polymer; aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aqueous **printing inks** or paints)
- IT **Inks**
(**printing**, water-thinned; aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aqueous **printing inks** or paints)
- IT 25085-34-1, Acrylic acid-styrene copolymers 25300-64-5, Maleic acid-styrene copolymer
(aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aqueous **printing inks** or paints)
- IT 62-23-7, p-Nitrobenzoic acid
(aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aqueous **printing inks** or paints)
- IT 60-23-1, 2-Aminoethylmercaptan
(chain-transfer agent; aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aqueous **printing inks** or paints)
- IT 188738-65-0 188738-74-1
(chain-transfer agent; in preparation of aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aqueous **printing inks** or paints)
- IT 188738-66-1 188738-67-2
(chain-transfer agent; in preparation of aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for **printing inks** or paints)
- IT 122-04-3 188679-55-2
(in preparation of aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aqueous **printing inks** or paints)
- IT 188679-56-3
(paint; aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aqueous **printing inks** or paints)
- IT 84-65-1DP, Anthraquinone, derivs., reaction product with amine-terminated urethane or acrylic polymer 117-78-2DP, 2-Anthraquinone carboxylic acid, reaction product with amine-terminated urethane polymer 117-79-3DP, 2-Amino-anthraquinone, reaction product with NCO-terminated urethane polymer 147-14-8DP, derivs., reaction product with amine- or OH-terminated urethane or amine-terminated acrylic polymer 1047-16-1DP, Quinacridone, derivs., reaction product with amine-terminated urethane or acrylic polymer 2381-23-9DP, 2-Anthraquinonesulfonyl chloride, reaction product with amine-terminated urethane or acrylic polymer 6470-87-7DP, 2-Anthraquinonecarbonyl chloride, reaction product with amine-terminated urethane or acrylic polymer 27918-14-5DP, 2-Amino-acridone, reaction product with NCO-terminated urethane polymer 55946-69-5DP, reaction product with isocyanate-terminated urethane polymer 59617-74-2DP, reaction product with isocyanate-terminated urethane polymer 67952-88-9DP, Dimethylolpropionic acid-isophorone diisocyanate-polypropylene glycol copolymer, terminated with organic dye, anthraquinone or acridone 188679-52-9DP, reaction product

with diazotized urethane polymer 188679-53-0DP, reaction product with amine-terminated urethane or acrylic polymer 188679-54-1DP, terminated with organic dye, anthraquinone or acridone 188738-62-7DP, reaction product with amine-terminated urethane polymer 188738-63-8DP, reaction product with amine-terminated urethane polymer 188738-64-9DP, reaction product with amine-terminated acrylic polymer (pigment-dispersing agent; aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aqueous printing inks or paints)

L62 ANSWER 36 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:577029 HCAPLUS

DOCUMENT NUMBER: 125:198504

TITLE: Diketopyrrolopyrrole pigment compositions with improved dispersibility and flowability and dispersing of the pigments and coatings or printing inks from them

INVENTOR(S): Sawamura, Katsuhiko; Hayashi, Mikio

PATENT ASSIGNEE(S): Toyo Ink Mfg Co, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 08170027	A2	19960702	JP 1995-171738	1995 0707
JP 2629150	B2	19970709		
PRIORITY APPLN. INFO.:			JP 1995-171738	1995 0707

AB The compns. comprise 100 parts diketopyrrolopyrrole pigments and 0.3-30 parts quinacridone (I) derivs. prepared by reaction of I coloring substances with melamine, benzoguanamine, methylolurea, and/or alkoxymethylurea and (substituted) phthalimide and/or N-oxymethylphthalimide or hydrolyzed products thereof containing carboxy groups or metal salts of the hydrolyzed products. Thus, 13 parts melamine was dissolved in 98% H2SO4 at 0-20°, stirred with 18 parts paraformaldehyde at 70-80° for 4 h, treated with 16 parts I at 20-30°, and subsequently treated with 50 parts phthalimide at 50-60° to give I derivative, 0.5 part of which was mixed with diketopyrrolopyrrole pigment 9.5, alkyd resin varnish 26.4, melamine resin varnish 13.6, 8:2 mixture of xylene and BuOH 20, and 7:3 mixture of alkyd resin and melamine resin 48.3 parts to give a composition showing thixotropic index 1.0-1.5 and good storage stability for 1 mo.

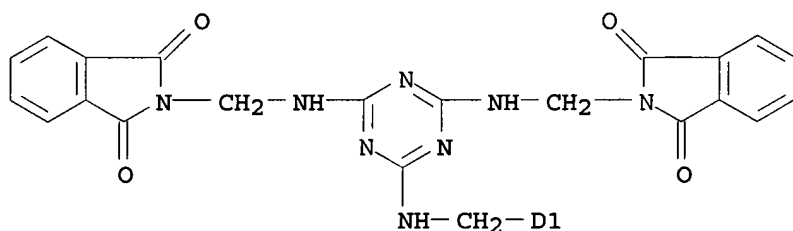
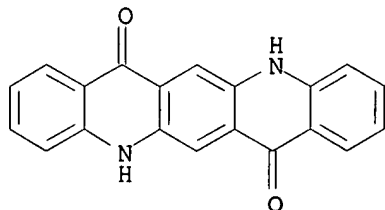
IT 120395-92-8P

(pigment; manufacture for diketopyrrolopyrrole-containing coatings with good dispersibility)

RN 120395-92-8 HCAPLUS

CN Quino[2,3-b]acridine-7,14-dione, [[[4,6-bis[[[(1,3-dihydro-1,3-dioxo-2H-isindol-2-yl)methyl]amino]-1,3,5-triazin-2-

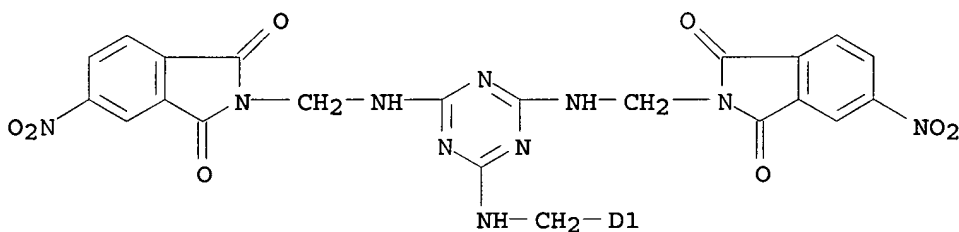
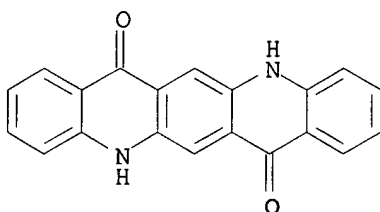
yl]amino]methyl]-5,12-dihydro- (9CI) (CA INDEX NAME)



IT 125504-73-6 125504-75-8
(pigment; manufacture for diketopyrrolopyrrole-containing coatings with
good dispersibility)

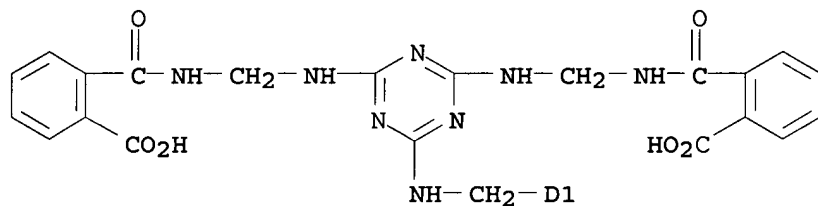
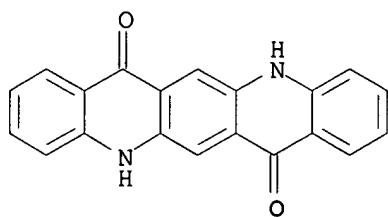
RN 125504-73-6 HCAPLUS

CN Quino[2,3-b]acridine-7,14-dione, [[[4,6-bis[[[(1,3-dihydro-5-nitro-1,3-dioxo-2H-isoindol-2-yl)methyl]amino]-1,3,5-triazin-2-yl]amino]methyl]-5,12-dihydro- (9CI) (CA INDEX NAME)



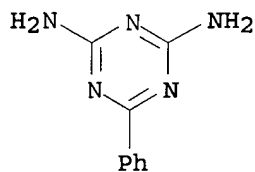
RN 125504-75-8 HCAPLUS

CN Benzoic acid, 2,2'-[[[6-[[[3,7,12,14-tetrahydro-7,14-dioxoquino[2,3-b]acridinyl)methyl]amino]-1,3,5-triazine-2,4-diyl]bis(iminomethyleneiminocarbonyl)]bis-, aluminum salt (3:2)
(9CI) (CA INDEX NAME)

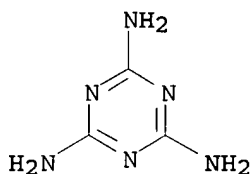


● 2/3 A1

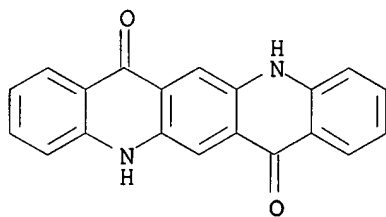
IT 91-76-9, Benzoguanamine 108-78-1, Melamine,
 reactions 1047-16-1, Quinacridone
 (reactant; for manufacture of quinacridone pigments for
 diketopyrrolopyrrole-containing coatings with good dispersibility)
 RN 91-76-9 HCAPLUS
 CN 1,3,5-Triazine-2,4-diamine, 6-phenyl- (9CI) (CA INDEX NAME)



RN 108-78-1 HCAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine (9CI) (CA INDEX NAME)



RN 1047-16-1 HCAPLUS
 CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
 (CA INDEX NAME)



IC ICM C09B067-20
 CC 41-5 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
 Section cross-reference(s): 42
 ST ketopyrrolopyrrole quinacridone pigment dispersion coating;
 ink ketopyrrolopyrrole quinacridone pigment dispersion;
 flowability ketopyrrolopyrrole quinacridone pigment dispersion
 IT **Inks**
 (printing, diketopyrrolopyrrole pigment compns.
 containing quinacridone pigments with improved dispersibility and
 flowability)
 IT **120395-92-8P**
 (pigment; manufacture for diketopyrrolopyrrole-containing coatings with
 good dispersibility)
 IT **125504-73-6 125504-74-7 125504-75-8**
 (pigment; manufacture for diketopyrrolopyrrole-containing coatings with
 good dispersibility)
 IT 85-41-6, Phthalimide **91-76-9**, Benzoguanamine
108-78-1, Melamine, reactions 118-29-6,
 N-Hydroxymethylphthalimide **1047-16-1**, Quinacridone
 30525-89-4, Paraformaldehyde
 (reactant; for manufacture of quinacridone pigments for
 diketopyrrolopyrrole-containing coatings with good dispersibility)

L62 ANSWER 37 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:422365 HCAPLUS

DOCUMENT NUMBER: 125:89255

TITLE: Method for dispersing pigment and
 water-based pigment
 dispersion

INVENTOR(S): Endo, Atsushi; Mochizuki, Akimitsu; Itabashi,
 Tadashi; Kuwabara, Masami

PATENT ASSIGNEE(S): Toyo Ink Manufacturing Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

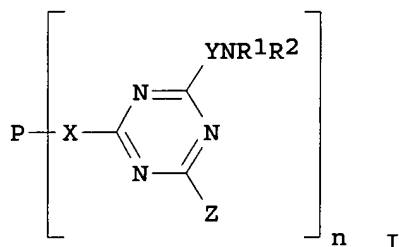
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 710706	A2	19960508	EP 1995-307650	1995 1027
EP 710706	A3	19970702		
EP 710706	B1	20000906		
R: DE, FR, GB				

JP 08127749	A2	19960521	JP 1994-264920	1994 1028
JP 3149707	B2	20010326		
US 5635552	A	19970603	US 1995-547332	1995 1024
PRIORITY APPLN. INFO.:			JP 1994-264920	A 1994 1028
OTHER SOURCE(S):		MARPAT 125:89255		
GI				



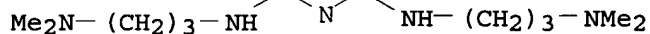
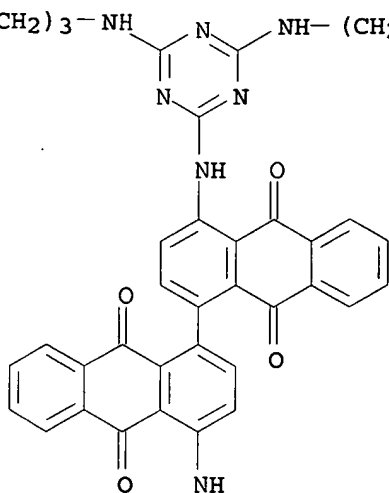
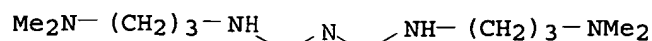
AB The method giving a dispersed pigment with improved storability, fluidity, and gloss and tinting strength when used in a water-based coating comprises dispersing 100 parts of a pigment, 0.1-30 parts of a pigment dispersing agent I and 5-300 parts of a water-based resin in 100-2000 parts of an aqueous medium having a water-soluble organic solvent concentration of 4-15%, wherein P = an organic dyestuff residue or a heterocyclic ring residue; X = a direct bond or a divalent binding group consisting of a chemical rational combination of 1-50 atoms selected from S, C, N, O and H; Y = a direct bond, N(R₄)R₃ or OR₃, in which R₃ is an optionally substituted C₁-20 alkylene or an optionally substituted phenylene; and R₄ = H, C₁-18 alkyl, or R₃N(R₁)R₂ wherein each of R₁ and R₂ is independently an optionally substituted C₁-18 alkyl group or is a heterocyclic ring which may contain N, O or S; Z = OH, C₁-4 alkoxy, or YN(R₁)R₂ wherein Y, R₁ and R₂ are as defined above; and n = 1-3. Reaction of C. I. Pigment Red 178 with cyanuric chloride and then with N,N-dimethylaminopropylamine gave I with Z, YNR₁R₂ = NH(CH₂)₃NMe₂, P = pigment residue, and n = 1. The dispersing agent and an acrylic resin was used to disperse C.I. Pigment Red 177 in an aqueous medium.

IT 178481-37-3P 178481-38-4P 178481-39-5P
178481-40-8P 178481-41-9P 178481-42-0P
178481-43-1P 178481-44-2P 178563-71-8P
178563-72-9P 178563-73-0P 178563-81-0P
178563-82-1P

(dispersing agent; method for dispersing pigment using cyanurate derivs. and water-based resin)

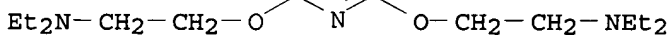
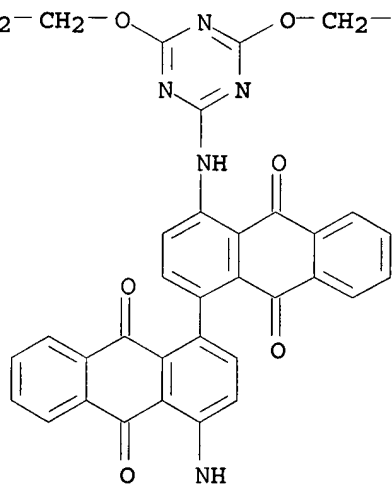
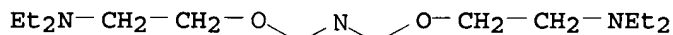
RN 178481-37-3 HCAPLUS

CN [1,1'-Bianthracene]-9,9',10,10'-tetrone, 4,4'-bis[[4,6-bis[[3-(dimethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



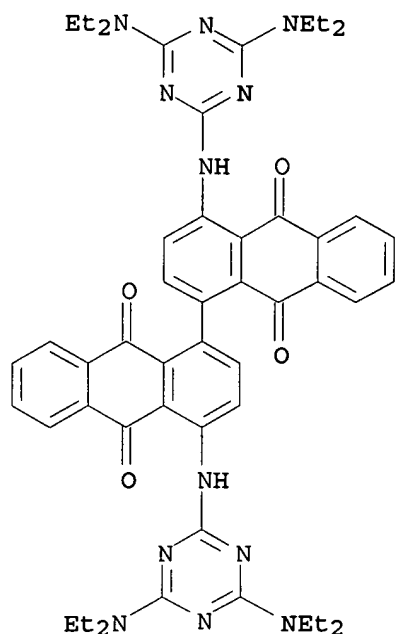
RN 178481-38-4 HCAPLUS

CN [1,1'-Bianthracene]-9,9',10,10'-tetrone, 4,4'-bis[[4,6-bis(2-(diethylamino)ethoxy)-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



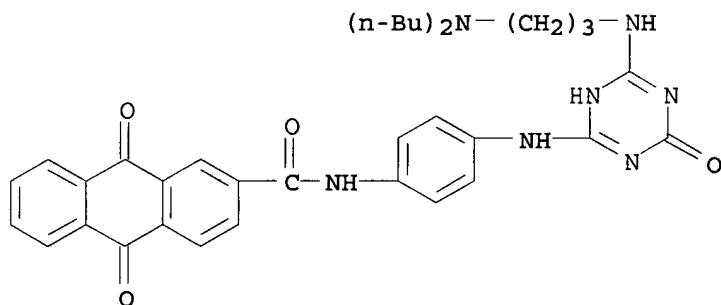
RN 178481-39-5 HCAPLUS

CN [1,1'-Bianthracene]-9,9',10,10'-tetrone, 4,4'-bis[[4,6-bis(diethylamino)-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



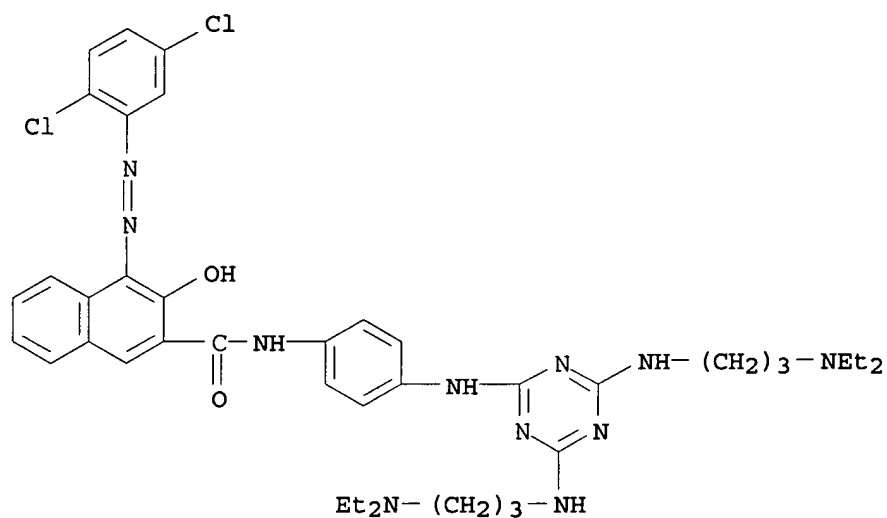
RN 178481-40-8 HCAPLUS

CN 2-Anthracenecarboxamide, N-[4-[[6-[[3-(dibutylamino)propyl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]phenyl]-9,10-dihydro-9,10-dioxo- (9CI) (CA INDEX NAME)



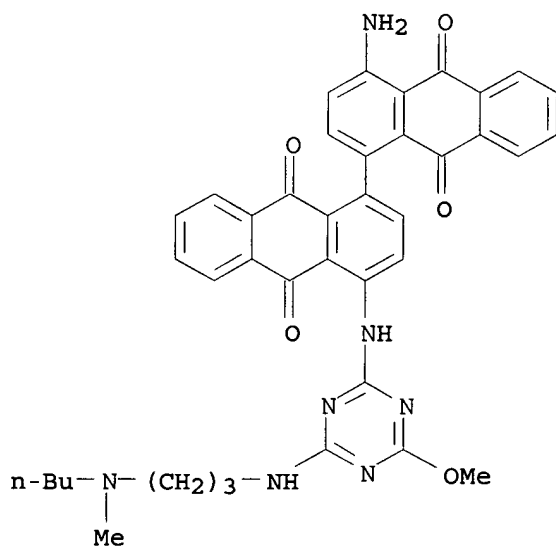
RN 178481-41-9 HCAPLUS

CN 2-Naphthalenecarboxamide, N-[4-[[[4,6-bis[[3-(diethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]-4-[(2,5-dichlorophenyl)azo]-3-hydroxy- (9CI) (CA INDEX NAME)



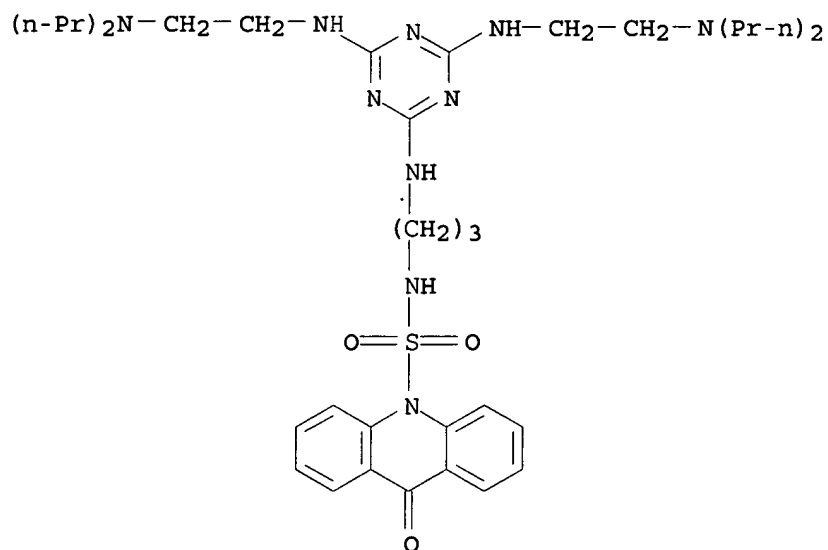
RN 178481-42-0 HCAPLUS

CN [1,1'-Bianthracene]-9,9',10,10'-tetrone, 4-amino-4'-[[4-[[3-(butylmethylamino)propyl]amino]-6-methoxy-1,3,5-triazin-2-yl]amino]-(9CI) (CA INDEX NAME)

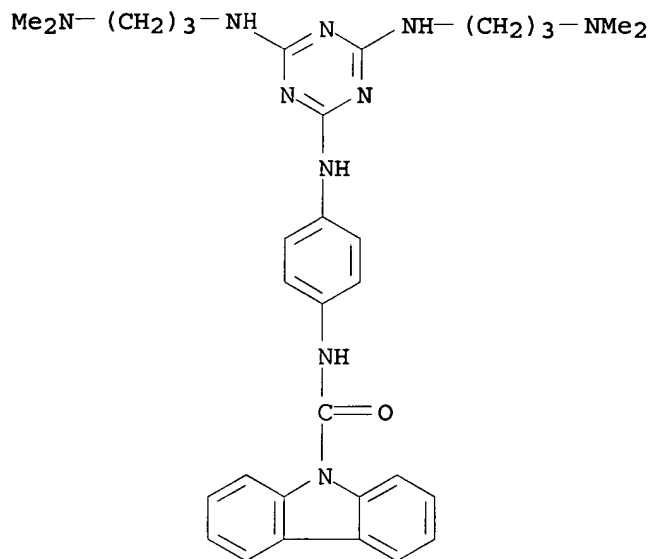


RN 178481-43-1 HCAPLUS

CN 10(9H)-Acridinesulfonamide, N-[3-[[4,6-bis[[2-(dipropylamino)ethyl]amino]-1,3,5-triazin-2-yl]amino]propyl]-9-oxo-(9CI) (CA INDEX NAME)

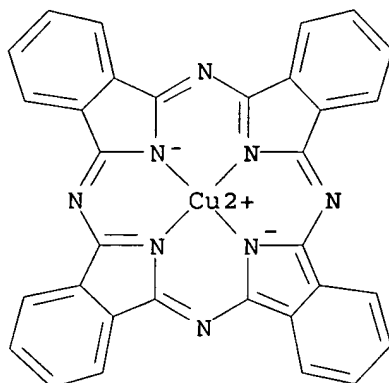


RN 178481-44-2 HCAPLUS
 CN 9H-Carbazole-9-carboxamide, N-[4-[[4,6-bis[[3-(dimethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]-(9CI) (CA INDEX NAME)

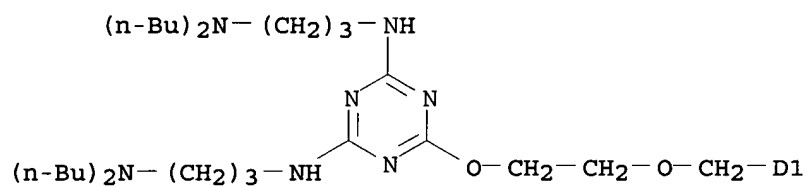


RN 178563-71-8 HCAPLUS
 CN Copper, [N,N'-bis[3-(dibutylamino)propyl]-6-[2-(29H,31H-phthalocyanin-C-ylmethoxy)ethoxy]-1,3,5-triazine-2,4-diaminato(2-)-N29,N30,N31,N32]- (9CI) (CA INDEX NAME)

PAGE 1-A

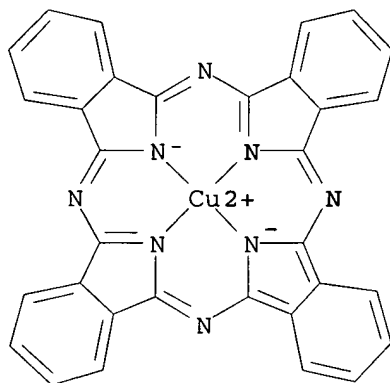


PAGE 2-A

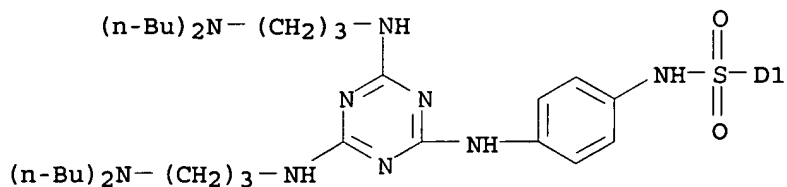


RN 178563-72-9 HCAPLUS
 CN Copper, [N-[4-[[4,6-bis[[3-(dibutylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]-29H,31H-phthalocyanine-C-sulfonamidato(2-)-N29,N30,N31,N32]- (9CI) (CA INDEX NAME)

PAGE 1-A

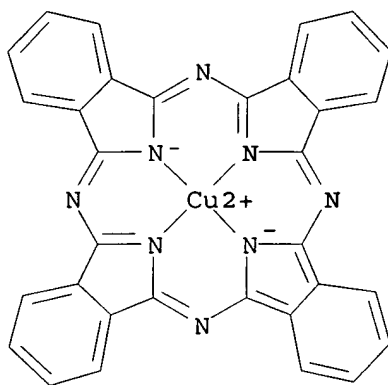


PAGE 2-A

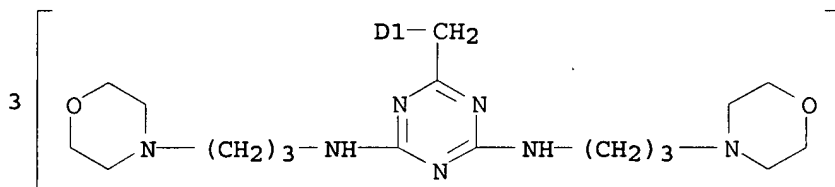


RN 178563-73-0 HCAPLUS
 CN Copper, [[6,6',6''-[29H,31H-phthalocyanine-C,C,C-triyltris(methylene)]tris[N,N'-bis[3-(4-morpholinyl)propyl]-1,3,5-triazine-2,4-diaminato]](2-)-N29,N30,N31,N32]-(9CI) (CA INDEX NAME)

PAGE 1-A

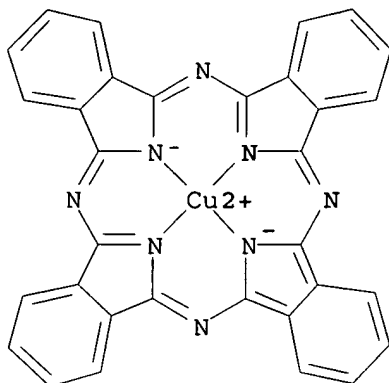


PAGE 2-A

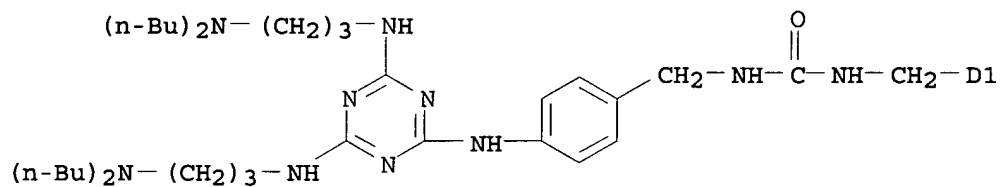


RN 178563-81-0 HCAPLUS
 CN Copper, [2-[[4-[[4,6-bis[[3-(dibutylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]amino]-N-(29H,31H-phthalocyanin-C-ylmethyl)acetamidato(2-)-N29,N30,N31,N32]-(9CI) (CA INDEX NAME)

PAGE 1-A

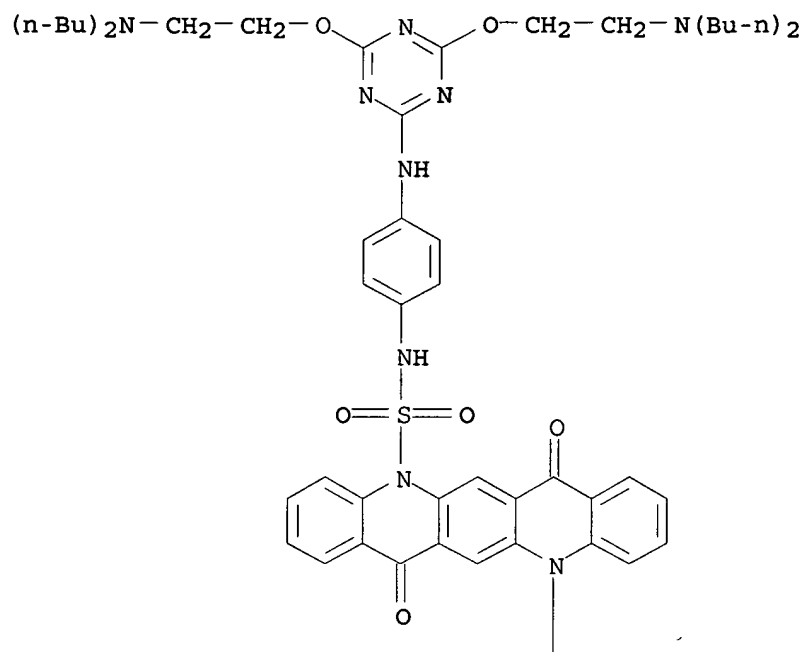


PAGE 2-A

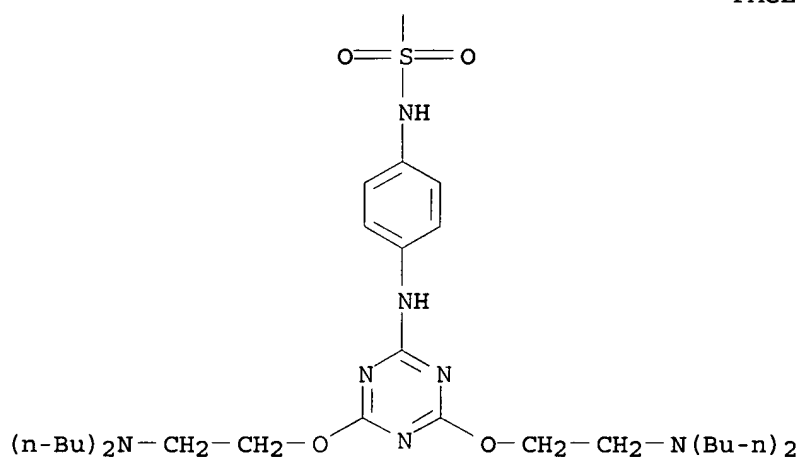


RN 178563-82-1 HCAPLUS
 CN Quino[2,3-b]acridine-5,12-disulfonamide, N,N'-bis[4-[[4,6-bis[2-(dibutylamino)ethoxy]-1,3,5-triazin-2-yl]amino]butylphenyl]-7,14-dihydro-7,14-dioxo- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

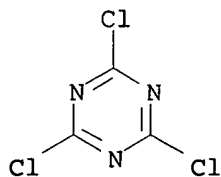


2 (D1-Bu-n)

IT 108-77-0, Cyanuric chloride 1047-16-1, C.I.
Pigment Violet 19 215247-95-3, C.I. Pigment Violet 23
(reactant; method for dispersing pigment using cyanurate
derivs. and water-based resin)

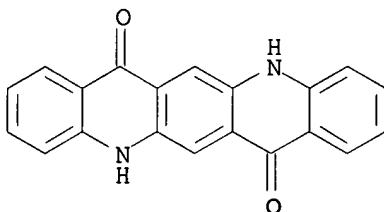
RN 108-77-0 HCAPLUS

CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)



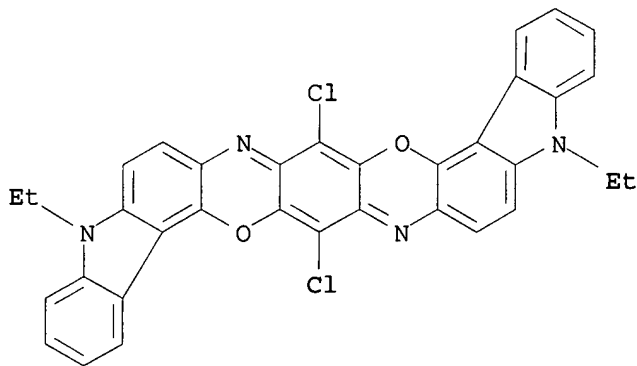
RN 1047-16-1 HCAPLUS

CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
(CA INDEX NAME)



RN 215247-95-3 HCAPLUS

CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-dihydro- (9CI) (CA INDEX NAME)



IC ICM C09D017-00

ICS C09B067-20; C09B067-46; C09B067-22

CC 42-6 (Coatings, Inks, and Related Products)

Section cross-reference(s): 41

ST pigment dispersion waterborne; cyanuric chloride pigment
dimethylaminopropylamine reaction; dispersing agent
cyanurate deriv pigment

IT 178481-37-3P 178481-38-4P 178481-39-5P

178481-40-8P 178481-41-9P 178481-42-0P

178481-43-1P 178481-44-2P 178563-71-8P

178563-72-9P 178563-73-0P 178563-81-0P

178563-82-1P

(dispersing agent; method for dispersing pigment using
cyanurate derivs. and water-based resin)

IT 4051-63-2, 4,4'-Diamino-1,1'-dianthraquinone

(reactant and substrate; method for dispersing pigment using cyanurate derivs. and water-based resin)

IT 86-74-8, Carbazole 100-37-8 102-83-0, N,N-Dibutylaminopropylamine 108-77-0, Cyanuric chloride 109-55-7 109-89-7, reactions 123-00-2, 4-Morpholinepropanamine 147-14-8, C.I. Pigment blue 15 578-95-0, Acridone 1047-16-1, C.I. Pigment Violet 19 3049-71-6, C.I. Pigment Red 178 4216-01-7, C.I. Pigment Yellow 108 6041-94-7, C.I. Pigment Red 2 6345-82-0 215247-95-3, C.I. Pigment Violet 23
(reactant; method for dispersing pigment using cyanurate derivs. and water-based resin)

L62 ANSWER 38 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:536274 HCAPLUS

DOCUMENT NUMBER: 121:136274

TITLE: Aluminum phthalocyanine pigments for inks and coatings and plastics

INVENTOR(S): Hikosaka, Michiji; Kimura, Shuichi; Mochizuki, Akimitsu

PATENT ASSIGNEE(S): Toyo Ink Mfg Co, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 06100787	A2	19940412	JP 1992-275178	1992 0918

PRIORITY APPLN. INFO.: JP 1992-275178

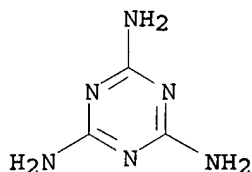
1992
0918

AB The title bright blue pigments contain ≤ 8 Cl substituents. An offset ink from Al phthalocyanine (from $AlCl_3$ and phthalonitrile) 20, gel varnish 70, and thinner 10 parts was more yellowish than Cu phthalocyanine and had better brightness than metal-free phthalocyanine.

IT 108-78-1D, 1,3,5-Triazine-2,4,6-triamine, polymers (coatings containing, aluminum phthalocyanine pigments for)

RN 108-78-1 HCAPLUS

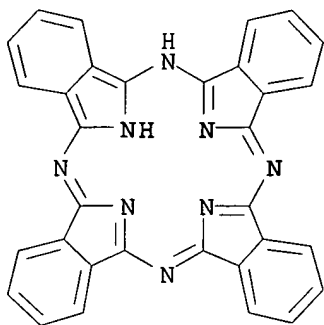
CN 1,3,5-Triazine-2,4,6-triamine (9CI) (CA INDEX NAME)



IT 574-93-6, Phthalocyanine (reaction of, with aluminum chloride)

RN 574-93-6 HCAPLUS

CN 29H,31H-Phthalocyanine (9CI) (CA INDEX NAME)



IC ICM C09B047-067
ICS C09B047-10
CC 42-6 (Coatings, Inks, and Related Products)
ST aluminum phthalocyanine pigment coating ink; plastic
aluminum phthalocyanine pigment
IT Acrylic polymers, uses
Alkyd resins
Aminoplasts
(coatings containing, aluminum phthalocyanine pigments for)
IT 108-78-1D, 1,3,5-Triazine-2,4,6-triamine, polymers
(coatings containing, aluminum phthalocyanine pigments for)
IT 14154-42-8P, Chloroaluminum phthalocyanine
(pigments, manufacture of, for inks and coatings)
IT 91-15-6, Phthalonitrile 147-14-8, Copper phthalocyanine
574-93-6, Phthalocyanine
(reaction of, with aluminum chloride)

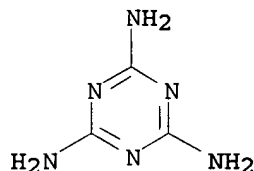
L62 ANSWER 39 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:247425 HCAPLUS
DOCUMENT NUMBER: 120:247425
TITLE: Pigment dispersants and pigment compositions
INVENTOR(S): Horie, Junichiro; Oshiumi, Isao
PATENT ASSIGNEE(S): Dainippon Ink & Chemicals, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05146661	A2	19930615	JP 1991-316320	1991 1129
PRIORITY APPLN. INFO.:				JP 1991-316320
				1991 1129

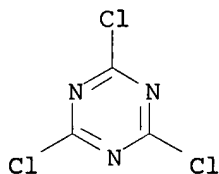
AB Pigment dispersants providing good pigment bleeding resistance in coatings contain compds. containing -N(R1OH)R2OH group (R1, R2 = alkylene) and aromatic ring-containing group directly bonded to a

triazine ring and/or their polymers. Cyanuric chloride was condensed with 2-amino-6-methoxybenzothiazole, diethanolamine, then 3-(dimethylamino)propanamine to give a pigment dispersant which was used for C.I. Pigment Violet 19 in melamine-alkyd and acrylic coatings.

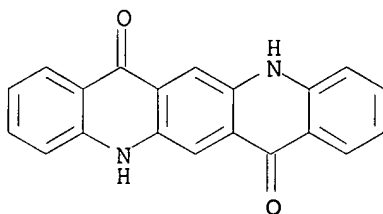
IT 108-78-1D, Melamine, polymers
(alkyd coatings containing, pigment dispersants for)
RN 108-78-1 HCAPLUS
CN 1,3,5-Triazine-2,4,6-triamine (9CI) (CA INDEX NAME)



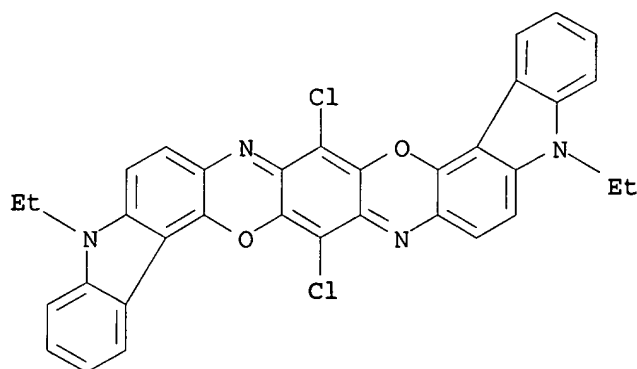
IT 108-77-0D, Cyanuric chloride, reaction products with amine compds.
(pigment dispersants, for coatings and inks)
RN 108-77-0 HCAPLUS
CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)



IT 1047-16-1, C.I. Pigment Violet 19 215247-95-3,
C.I. Pigment Violet 23
(pigments, for coatings and inks, dispersants for)
RN 1047-16-1 HCAPLUS
CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
(CA INDEX NAME)

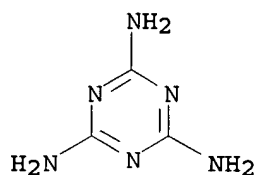


RN 215247-95-3 HCAPLUS
CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-dihydro- (9CI) (CA INDEX NAME)

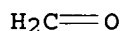


- IC ICM B01F017-32
ICS C09C003-08; C09C003-10; C09D017-00
- ICA D06P001-642
- CC 42-6 (**Coatings**, Inks, and Related Products)
Section cross-reference(s): 46
- IT **Pigments**
(for coatings and **inks**, dispersants for, triazinetrifluoromethyl compds. as)
- IT **Inks**
(pigments for, dispersants for, triazinetrifluoromethyl compds. as)
- IT Dispersing agents
(triazinetrifluoromethyl compds., for pigments for coatings and **inks**)
- IT **108-78-1D**, Melamine, polymers
(alkyd coatings containing, pigment dispersants for)
- IT 104-78-9DP, 3-(**Diethylamino**)propanamine, reaction products with cyanuric chloride and (**aminomethyl**)dioxazine and diethanolamine 4051-63-2DP, C.I. Pigment Red 177, reaction products with cyanuric chloride and diethanolamine and (**dimethylamino**)propanamine 59617-74-2DP, reaction products with cyanuric chloride and (**diethylamino**)propanamine and diethanolamine 68810-31-1DP, Dipropanolamine, reaction products with cyanuric chloride and (**aminomethyl**)diketopyrrolopyrrole and (**dimethylamino**)propanamine 118279-71-3DP, reaction products with cyanuric chloride and diethanolamine and (**dimethylamino**)propanamine 143986-83-8DP, Perylenemethanamine, reaction products with cyanuric chloride and diethanolamine and (**dimethylamino**)propanamine
(manufacture of, for pigment dispersants, for coatings and **inks**)
- IT **108-77-0D**, Cyanuric chloride, reaction products with amine compds. 109-55-7D, 3-(**Dimethylamino**)propanamine, reaction products with cyanuric chloride and other amines 111-42-2D, Diethanolamine, reaction products with cyanuric chloride and other amines 1747-60-0D, 2-**Amino**-6-methoxybenzothiazole, reaction products with cyanuric chloride and other amines
(pigment dispersants, for coatings and **inks**)
- IT 147-14-8, C.I. Pigment Blue 15 **1047-16-1**, C.I. Pigment Violet 19 3049-71-6, C.I. Pigment Red 178 84632-65-5, C.I. Pigment Red 254 **215247-95-3**, C.I. Pigment Violet 23
(pigments, for coatings and **inks**, dispersants for)

L62 ANSWER 40 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1988:592207 HCAPLUS
 DOCUMENT NUMBER: 109:192207
 TITLE: Effect of surface modification of organic pigments on the properties of water-thinned inks
 AUTHOR(S): Satushev, S. A.; Osik, Yu. I.; Mishchenko, V. N.; Shvets, V. I.; Rusakovskii, V. M.
 CORPORATE SOURCE: VNII Poligr., Kiev, USSR
 SOURCE: Lakokrasochnye Materialy i Ikh Primenenie (1988), (4), 19-20
 CODEN: LAMAAD; ISSN: 0023-737X
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB Surface modification of organic pigments, such as Pigment Red 5S, with nonionic surfactant OP-7 improved the properties of water-thinned **printing inks** based on maleic anhydride-styrene copolymer and melamine resin, i.e., reduced their viscosity, thixotropy, and flocculation. The modified pigments were used of paste colorants, which required a impeller mixer. In contrast, unmodified pigments required grinding in a ball or bead mill at a larger energy consumption. Modified pigments had improved wettability and reduced sp. surface area. The **hydrophobic** properties of modified pigments were studied via adsorption-desorption of hexane and EtOH.
 IT 9003-08-1, Melamine-formaldehyde copolymer (inks, water-thinned, properties of, surface modification of organic pigments in relation to)
 RN 9003-08-1 HCAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde (9CI) (CA INDEX NAME)
 CM 1
 CRN 108-78-1
 CMF C3 H6 N6



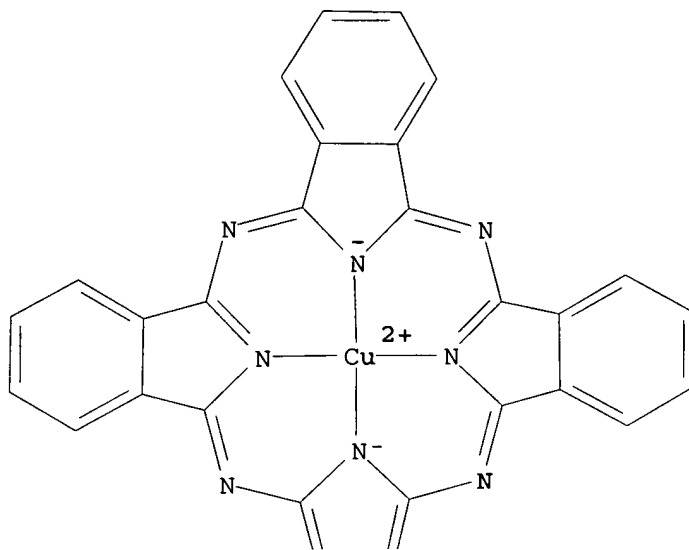
CM 2
 CRN 50-00-0
 CMF C H2 O



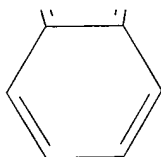
IT 147-14-8, Phthalocyanine blue (surface modification of, with nonionic surfactants, water-thinned ink properties in relation to)
 RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-
κN29,κN30,κN31,κN32]-, (SP-4-1)- (9CI)
(CA INDEX NAME)

PAGE 1-A



PAGE 2-A



CC 42-6 (Coatings, Inks, and Related Products)
ST pigment surface modification nonionic surfactant; **printing ink** property pigment modification; waterborne **ink** property pigment modification
IT Pigments
 (organic, surface modification of, with nonionic surfactants, water-thinned **ink** properties in relation to)
IT Carbon black, uses and miscellaneous
 (pigments, surface modification of, with nonionic surfactants, water-thinned **ink** properties in relation to)
IT Size reduction
 (grinding, of organic pigments, in manufacture of water-thinned **inks**, surface modification with nonionic surfactants in relation to)
IT Surfactants
 (nonionic, organic pigment surface modification with,

water-thinned ink properties in relation to)

IT **Inks**
 (printing, water-thinned, properties of, surface
 modification of organic pigments with nonionic surfactants in
 relation to)

IT **9003-08-1**, Melamine-formaldehyde copolymer 9011-13-6,
 Maleic anhydride-styrene copolymer
 (inks, water-thinned, properties of, surface
 modification of organic pigments in relation to)

IT **147-14-8**, Phthalocyanine blue 6486-23-3 61932-63-6,
 Pigment Red 5S
 (surface modification of, with nonionic surfactants,
 water-thinned ink properties in relation to)

L62 ANSWER 41 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:178189 HCAPLUS

DOCUMENT NUMBER: 106:178189

TITLE: Pigment dispersants

INVENTOR(S): Ehashi, Shigeyuki; Sakamoto, Mare; Hikosaka,
 Michichika

PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF

DOCUMENT TYPE: Patent

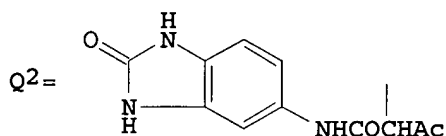
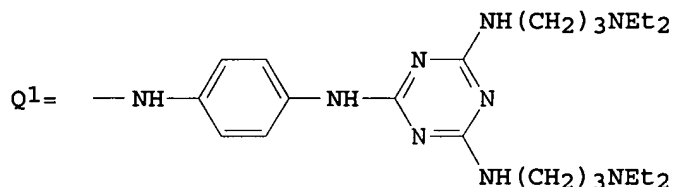
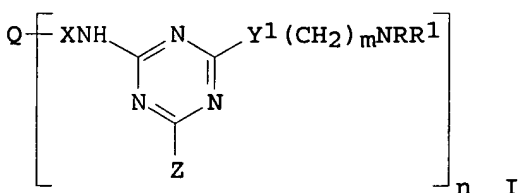
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 61246261	A2	19861101	JP 1985-87421	1985 0425
JP 05072943	B4	19931013		
PRIORITY APPLN. INFO.:			JP 1985-87421	1985 0425

GI



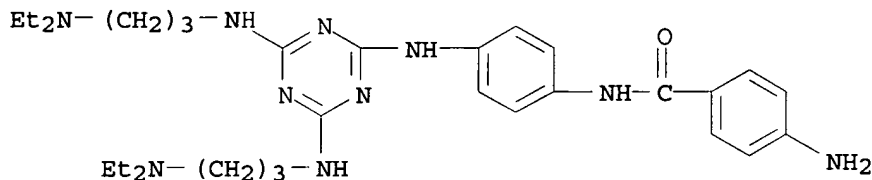
AB Non-agglomerating, non-crystalline pigment dispersants of the general formula I [Q = organic dye residue; X = CONHY2, SO2NHCOCH2NHY; Y1 = NH, O; Y2 = (un)substituted alkylene, arylene; Z = OH, alkoxy, Y1(CH2)mNRR1, NHXQ (when n = 1); R, R1 = (un)substituted alkyl, RR1 = N-heterocycle member; m = 1-6; n = 1-4] were prepared and used for **inks** and coatings with excellent workability and storability. Thus, Q1H was treated with 4-**aminobenzoyl** chloride, diazotized, and coupled with Q2H to give p-(Q2N:N)C6H4COQ1. A low viscosity gravure **ink** was prepared from a 90:10 mixture of C.I. Pigment Yellow 83 and a dispersant in a PVC varnish at pigment content 10%.

IT 107830-16-0

(coupling of diazotized, with acetoacetamidobenzimidazolone)

RN 107830-16-0 HCAPLUS

CN Benzamide, 4-amino-N-[4-[[4,6-bis[[3-(diethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]- (9CI) (CA INDEX NAME)

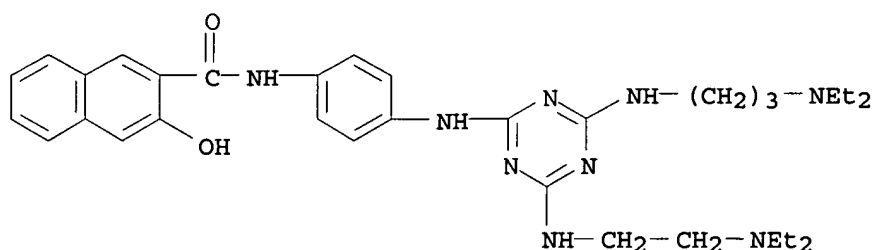


IT 107830-18-2

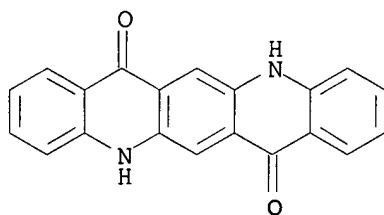
(coupling of, with diazotized nitroaniline, in pigment dispersant manufacture)

RN 107830-18-2 HCAPLUS

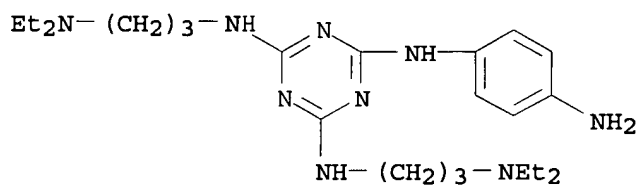
CN 2-Naphthalenecarboxamide, N-[4-[[4-[[2-(diethylamino)ethyl]amino]-6-[[3-(diethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]-3-hydroxy- (9CI) (CA INDEX NAME)



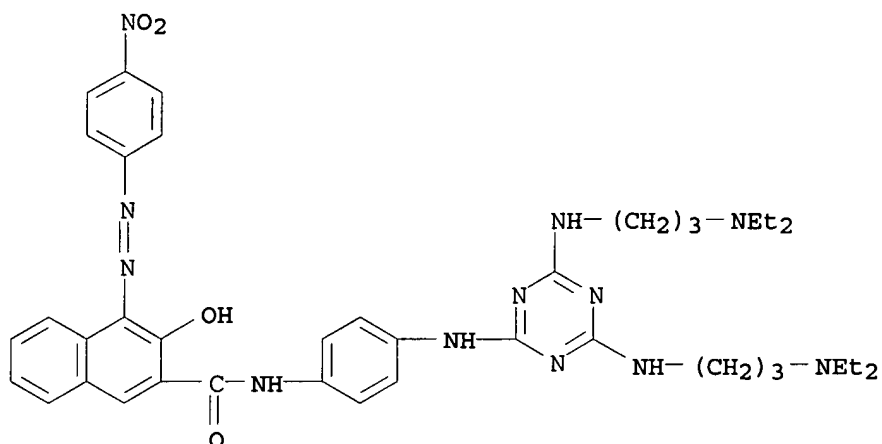
IT 1047-16-1D, Quinacridone, chloroacetamidomethylated,
 reaction products with **amino** triazine derivs.
 81980-94-1D, reaction products with chlorosulfonated
 copper phthalocyanine 107830-17-1 107854-49-9
 107854-50-2 107901-00-8 108026-02-4
 (dispersants, for pigments for **inks** and coatings)
 RN 1047-16-1 HCAPLUS
 CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
 (CA INDEX NAME)



RN 81980-94-1 HCAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, N-(4-aminophenyl)-N',N''-bis[3-(diethylamino)propyl]- (9CI) (CA INDEX NAME)



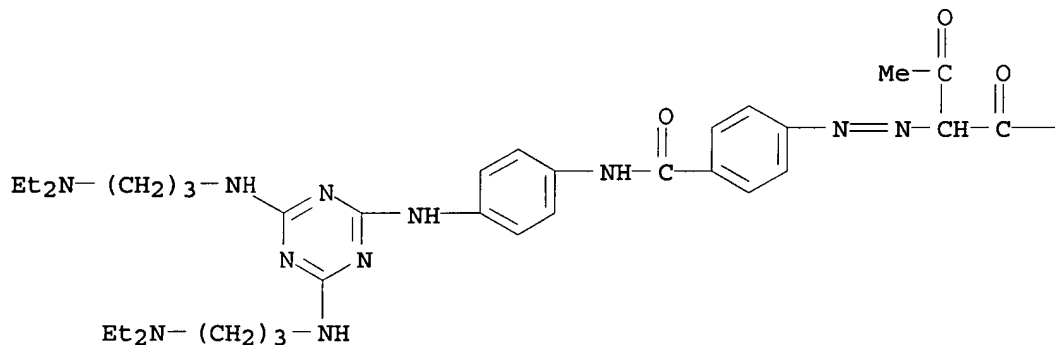
RN 107830-17-1 HCAPLUS
 CN 2-Naphthalenecarboxamide, N-[4-[[4,6-bis[[3-(diethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]-3-hydroxy-4-[(4-nitrophenyl)azo]- (9CI) (CA INDEX NAME)



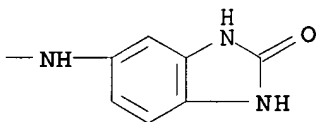
RN 107854-49-9 HCAPLUS

CN Benzamide, N-[4-[[4,6-bis[[3-(diethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]-4-[[1-[[2,3-dihydro-2-oxo-1H-benzimidazol-5-yl]amino]carbonyl]-2-oxopropyl]azo]- (9CI) (CA INDEX NAME)

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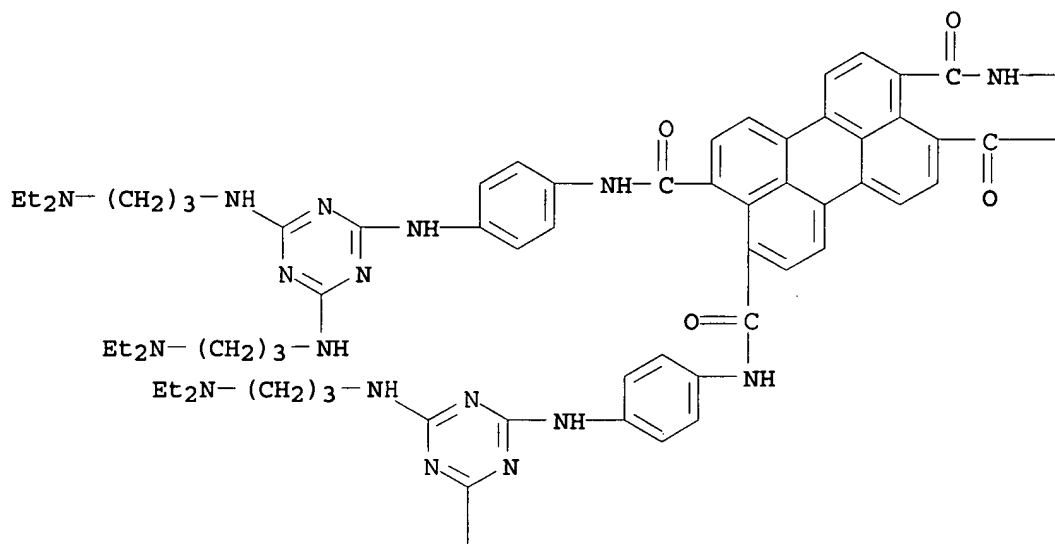
PAGE 1-B



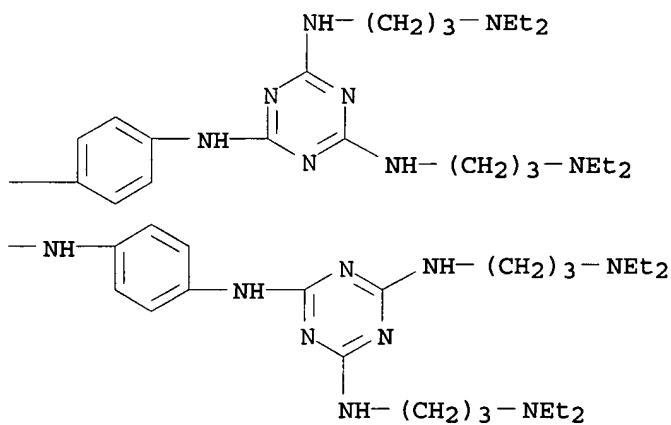
RN 107854-50-2 HCAPLUS

CN 3,4,9,10-Perylenetetracarboxamide, N,N',N'',N'''-tetrakis[4-[[4,6-bis[[3-(diethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]- (9CI) (CA INDEX NAME)

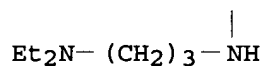
PAGE 1-A



PAGE 1-B

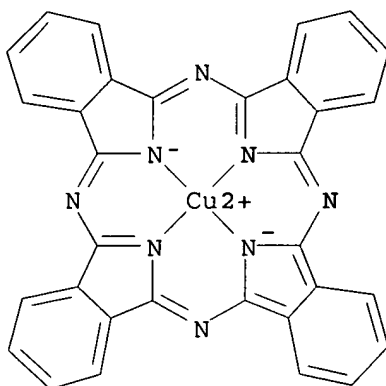


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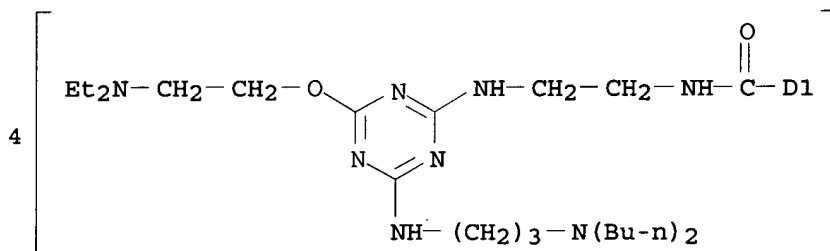


RN 107901-00-8 HCAPLUS
 CN Copper, [N,N',N'',N'''-tetrakis[2-[[4-[[3-(diethylamino)propyl]amino]-6-[2-(diethylamino)ethoxy]-1,3,5-triazin-2-yl]amino]ethyl]-29H,31H-phthalocyanine-C,C,C,C-tetracarboxamidato(2-)-N29,N30,N31,N32] - (9CI) (CA INDEX NAME)

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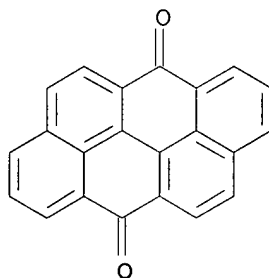


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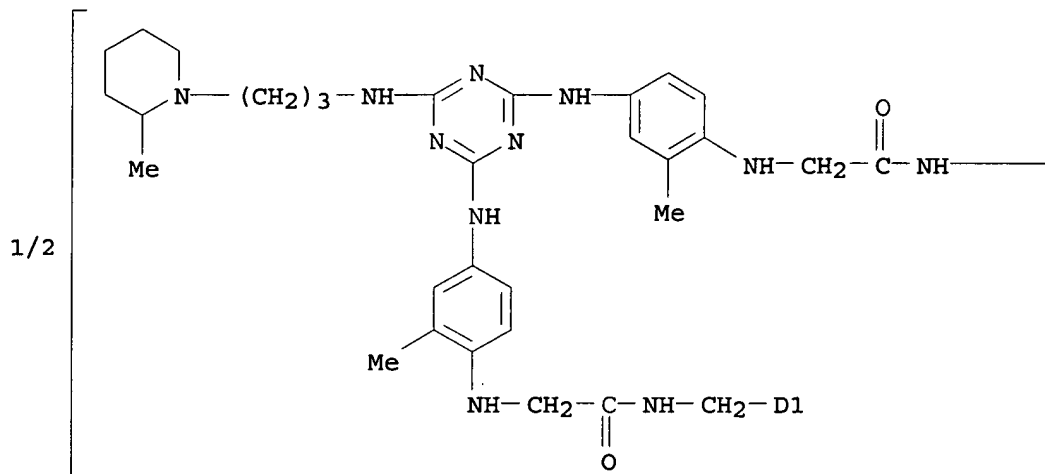


RN 108026-02-4 HCAPLUS
 CN Acetamide, 2,2'-[[6-[[3-(2-methyl-1-piperidinyl)propyl]amino]-1,3,5-triazine-2,4-diyl]bis[imino(2-methyl-4,1-phenylene)imino]]bis[N-[(6,12-dihydro-6,12-dioxodibenzo[def,mno]chrysenyl)methyl]- (9CI) (CA INDEX NAME)

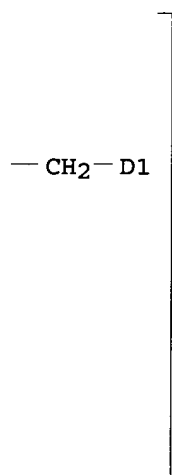
PAGE 1-A



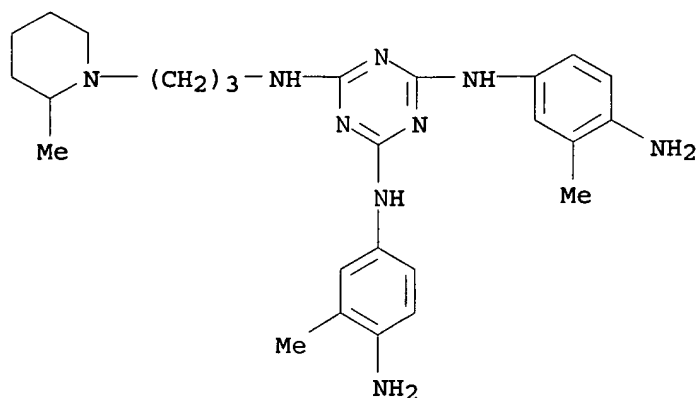
PAGE 2-A



PAGE 2-B



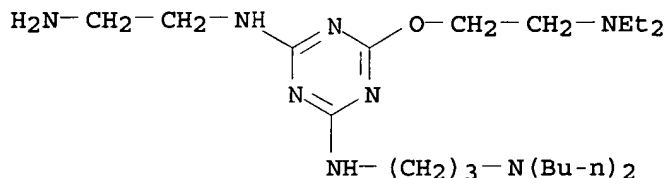
IT 107830-21-7
 (reaction of, with chloroacetamidomethylantranthrone)
 RN 107830-21-7 HCAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, N,N'-bis(4-amino-3-methylphenyl)-
 N''-[3-(2-methyl-1-piperidinyl)propyl]- (9CI) (CA INDEX NAME)



IT 107830-19-3

(reaction of, with copper phthalocyaninetetracarbonyl chloride,
in pigment dispersant manufacture)

RN 107830-19-3 HCAPLUS

CN 1,3,5-Triazine-2,4-diamine, N-(2-aminoethyl)-N'-[3-(
(dibutylamino)propyl]-6-[2-(diethylamino)ethoxy]-(9CI) (CA INDEX
NAME)

IC ICM C09C003-08

ICS D06P001-642

CC 42-6 (Coatings, Inks, and Related Products)

IT Pigments

(for inks and coatings, dispersants for, triazine
group-containing dye derivs. as)

IT Inks

(pigment-based, dispersant for)

IT Dispersing agents

(triazine group-containing dye derivs., for pigments for
inks and coatings)

IT 107830-16-0

(coupling of diazotized, with acetoacetamidobenzimidazolone)

IT 26576-46-5

(coupling of, with diazotized amino triazine derivs.,
in pigment dispersant manufacture)

IT 107830-18-2

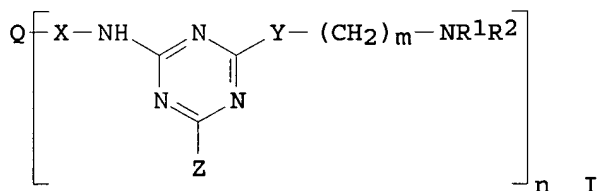
(coupling of, with diazotized nitroaniline, in pigment
dispersant manufacture)IT 147-14-8D, Copper phthalocyanine, chlorosulfonated, reaction
products with amino triazine derivs. 1047-16-1D, Quinacridone, chloroacetamidomethylated, reaction products with
amino triazine derivs. 81980-94-1D, reaction
products with chlorosulfonated copper phthalocyanine
107830-17-1 107854-49-9 107854-50-2

107901-00-8 108026-02-4
 (dispersants, for pigments for inks and coatings)
 IT 38886-65-6, Nitrobenzoyl chloride 87709-59-9 107830-20-6
 108026-01-3
 (reaction of, with amino triazine derivs., in pigment
 dispersant manufacture)
 IT 107830-21-7
 (reaction of, with chloroacetamidomethylanthrone)
 IT 107830-19-3
 (reaction of, with copper phthalocyaninetetracarbonyl chloride,
 in pigment dispersant manufacture)

L62 ANSWER 42 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1987:139886 HCAPLUS
 DOCUMENT NUMBER: 106:139886
 TITLE: Triazine dyes and pigments for pigment
 dispersants
 INVENTOR(S): Katsura, Hiromitsu; Ehashi, Shigeyuki;
 Kashioka, Motohiko; Sakamoto, Makoto
 PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
 SOURCE: Brit. UK Pat. Appl., 23 pp.
 CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2173812	A1	19861022	GB 1985-9454	1985 0412
GB 2173812	B2	19881019		
US 4664714	A	19870512	US 1985-721557	1985 0410
FR 2580657	A1	19861024	FR 1985-5788	1985 0417
FR 2580657	B1	19920403		
PRIORITY APPLN. INFO.:			GB 1985-9454	1985 0412

OTHER SOURCE(S): CASREACT 106:139886
 GI



AB The triazines I (Q = organic dye or pigment residue; X = -, CH₂,

aromatic amino-containing group; Y = NH, O; Z = OH, alkoxy, amino) are dispersing agents for pigments, useful in preparation of inks and paints. 4-[(4-Aminophenyl)azo]-3-hydroxy-2-naphthanilide (19 parts) was condensed with 19 parts cyanuric chloride, and 20 parts this product was condensed with 19 parts Bu₂N(CH₂)₃NH₂ to give a dispersant (II). An ink prepared by mixing 10% C.I. Yellow 83 with a vinyl chloride resin and adding 10% II (based on dye) had viscosity 1480, 1120, 700, and 540 cP at 6, 12, 30, and 60 rpm, resp.; vs. 3530, 1520, 840, and 610, resp., without II.

IT 1047-16-1D, aminotriazine derivs.

98772-91-9 98809-05-3 98809-06-4

98809-07-5 98809-08-6 98809-09-7

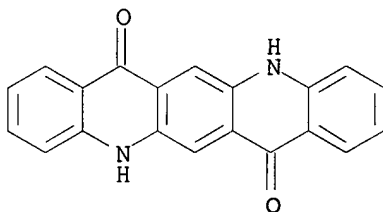
98809-10-0 98809-11-1 106917-20-8D,

quinacridine derivs. 106917-21-9D, quinacridone derivs.

(dispersing agents, for pigments)

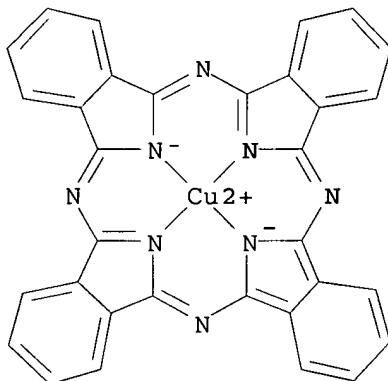
RN 1047-16-1 HCAPLUS

CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
(CA INDEX NAME)



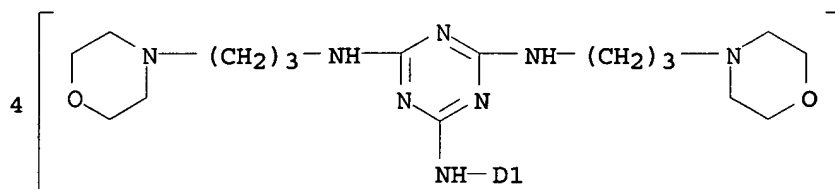
RN 98772-91-9 HCAPLUS

CN Copper, [N,N',N'',N'''-tetrakis[4,6-bis[[3-(4-morpholinyl)propyl]amino]-1,3,5-triazin-2-yl]-29H,31H-phthalocyanine-C,C,C,C-tetraminato(2-)-κN29,κN30,κN31,κN32]- (9CI) (CA INDEX NAME)



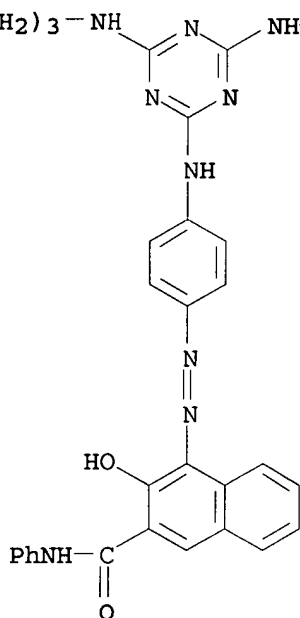
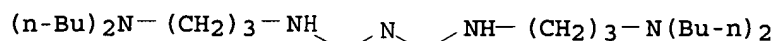
PAGE 1-A

PAGE 2-A



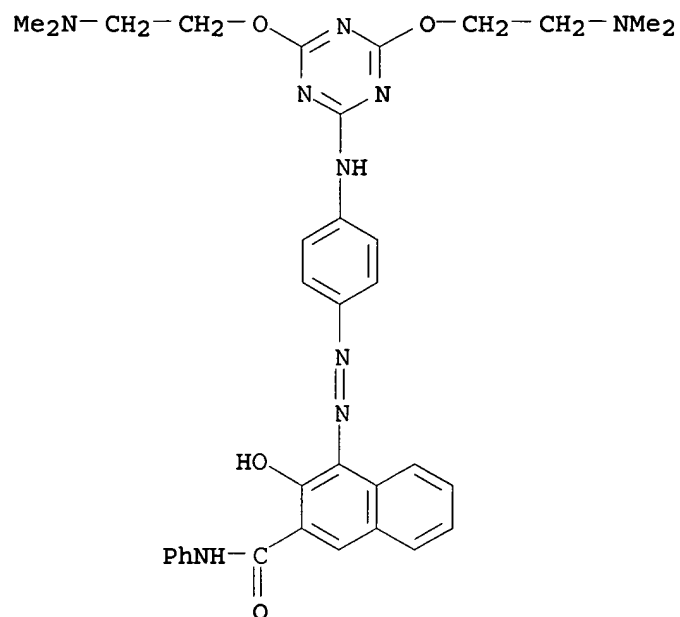
RN 98809-05-3 HCAPLUS

CN 2-Naphthalenecarboxamide, 4-[[4-[[4,6-bis[[3-(dibutylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]azo]-3-hydroxy-N-phenyl- (9CI) (CA INDEX NAME)



RN 98809-06-4 HCAPLUS

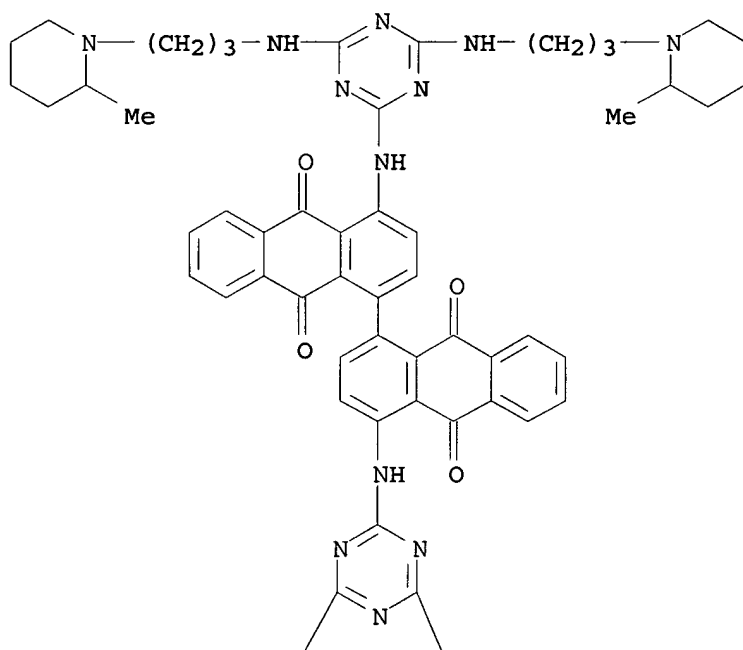
CN 2-Naphthalenecarboxamide, 4-[[4-[[4,6-bis[2-(dimethylamino)ethoxy]-1,3,5-triazin-2-yl]amino]phenyl]azo]-3-hydroxy-N-phenyl- (9CI) (CA INDEX NAME)



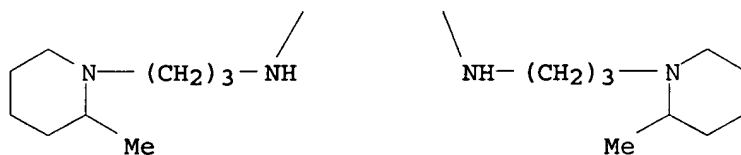
RN 98809-07-5 HCAPLUS

CN [1,1'-Bianthracene]-9,9',10,10'-tetrone, 4,4'-bis[[4,6-bis[[3-(2-methyl-1-piperidinyl)propyl]amino]-1,3,5-triazin-2-yl]amino]-(9CI) (CA INDEX NAME)

PAGE 1-A



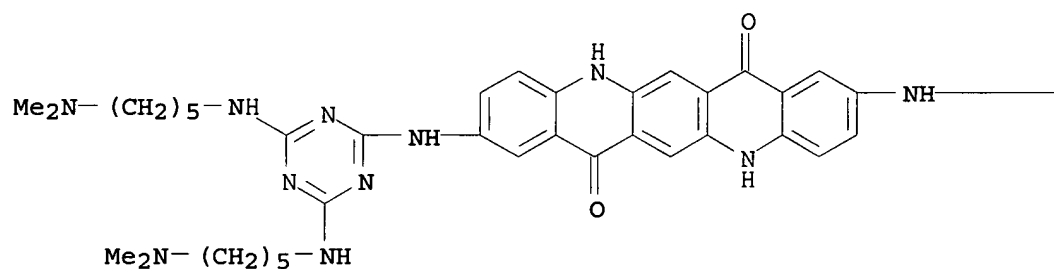
PAGE 2-A



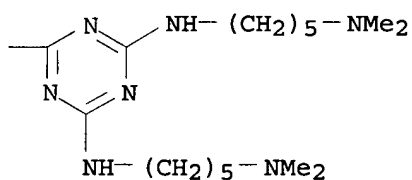
RN 98809-08-6 HCAPLUS

CN Quino[2,3-b]acridine-7,14-dione, 2,9-bis[[4,6-bis[[5-(dimethylamino)pentyl]amino]-1,3,5-triazin-2-yl]amino]-5,12-dihydro- (9CI) (CA INDEX NAME)

PAGE 1-A



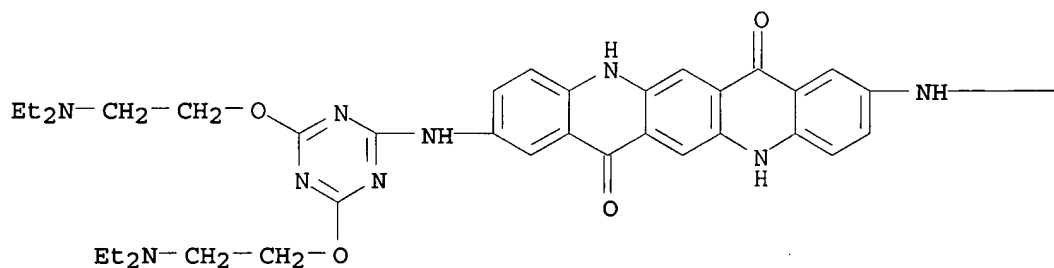
PAGE 1-B



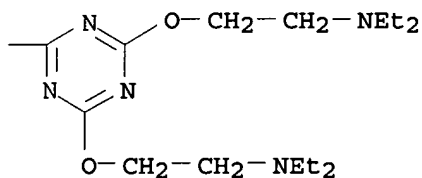
RN 98809-09-7 HCAPLUS

CN Quino[2,3-b]acridine-7,14-dione, 2,9-bis[[4,6-bis[2-(diethylamino)ethoxy]-1,3,5-triazin-2-yl]amino]-5,12-dihydro- (9CI) (CA INDEX NAME)

PAGE 1-A

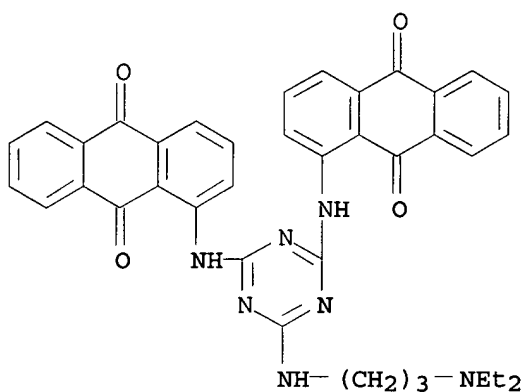


PAGE 1-B



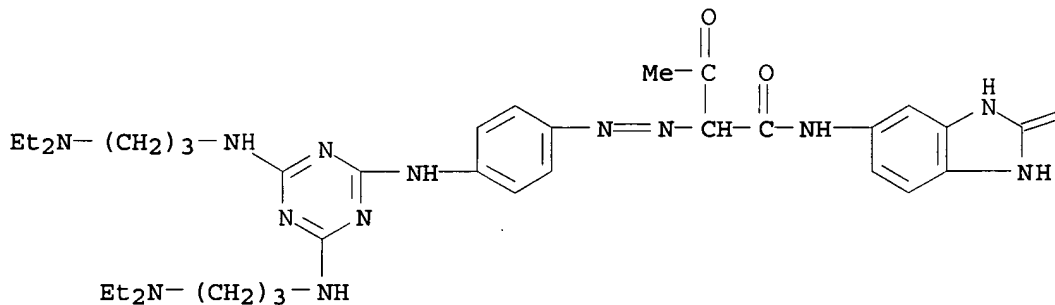
RN 98809-10-0 HCAPLUS

CN 9,10-Anthracenedione, 1,1'-[[6-[[3-(diethylamino)propyl]amino]-1,3,5-triazine-2,4-diyl]diimino]bis- (9CI) (CA INDEX NAME)



RN 98809-11-1 HCAPLUS

CN Butanamide, 2-[[[4-[[4,6-bis[[3-(diethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]azo]-N-(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)-3-oxo- (9CI) (CA INDEX NAME)

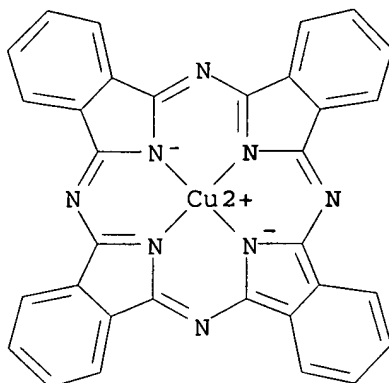


PAGE 1-A

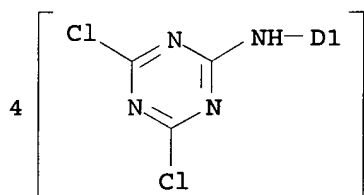
$\equiv 0$ CCN(CC)CCNC1=NC=NC(NC2=CC=C(NCC(=O)N)C=C2)N1C3=NC=NC(NCCN)C3
$$\begin{array}{c} \text{H}_2\text{N} \quad \text{N} \quad \text{NH} \text{---} \text{CH}_2 \text{---} \text{CH}_2 \text{---} \text{N}(\text{Bu-n})_2 \\ \diagdown \quad \diagup \quad \diagdown \\ \text{N} \quad \text{N} \\ \diagup \quad \diagdown \\ \text{NH} \text{---} \text{CH}_2 \text{---} \text{CH}_2 \text{---} \text{N}(\text{Bu-n})_2 \end{array}$$
CCN(CC)CCNC1=NC=NC(NC2=CC=C(N)C=C2)=N1

USHA SHRESTHA EIC 1700 REM 4B28

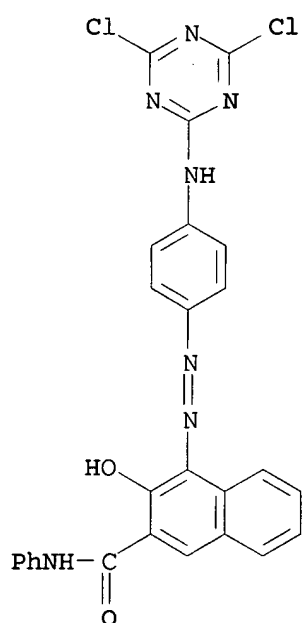
PAGE 1-A



PAGE 2-A

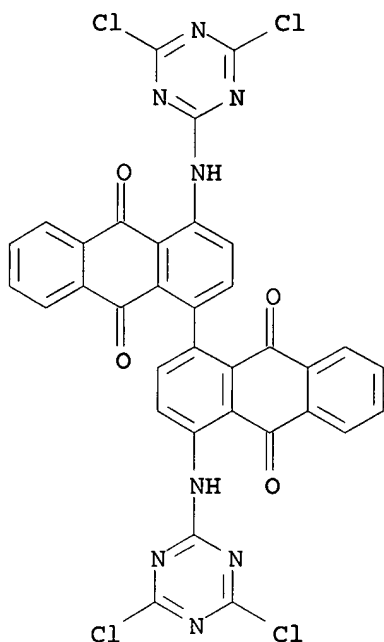


RN 98809-02-0 HCAPLUS
 CN 2-Naphthalenecarboxamide, 4-[[4-[(4,6-dichloro-1,3,5-triazin-2-yl)amino]phenyl]azo]-3-hydroxy-N-phenyl- (9CI) (CA INDEX NAME)

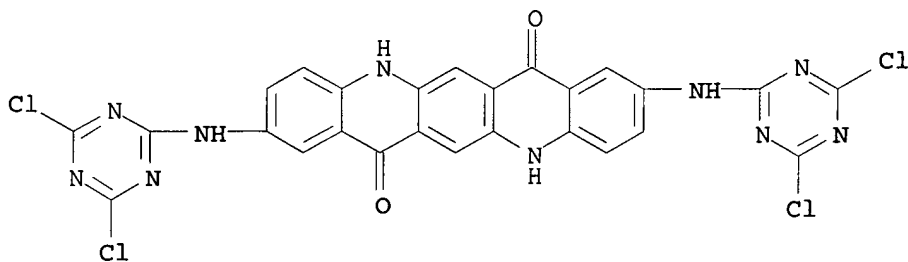


RN 98809-03-1 HCAPLUS

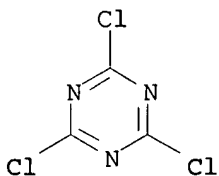
CN [1,1'-Bianthracene]-9,9',10,10'-tetrone, 4,4'-bis[(4,6-dichloro-1,3,5-triazin-2-yl)amino]- (9CI) (CA INDEX NAME)



RN 98809-04-2 HCAPLUS
CN Quino[2,3-b]acridine-7,14-dione, 2,9-bis[(4,6-dichloro-1,3,5-triazin-2-yl)amino]-5,12-dihydro- (9CI) (CA INDEX NAME)



IT 108-77-0
(reaction of, with amines)
RN 108-77-0 HCAPLUS
CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)



IC ICM C09B001-00

ICS C09B029-00; C09B047-08; C09B048-00; C09B067-20; C09B067-22
 CC 42-6 (Coatings, Inks, and Related Products)
 ST ink pigment dispersing agent; azo dye deriv dispersant;
 triazine dye deriv dispersant
 IT Dispersing agents
 (dye triazine derivs., for pigments in inks and
 paints)
 IT 147-14-8D, aminotriazine derivs. 1047-16-1D,
 aminotriazine derivs. 98772-91-9
 98809-05-3 98809-06-4 98809-07-5
 98809-08-6 98809-09-7 98809-10-0
 98809-11-1 106917-20-8D, quinacridine derivs.
 106917-21-9D, quinacridone derivs.
 (dispersing agents, for pigments)
 IT 81980-94-1P
 (manufacture of, and coupling of diazotized with benzimidazoles)
 IT 98772-90-8P 98809-02-0P 98809-03-1P
 98809-04-2P
 (manufacture of, and reaction with amines)
 IT 82-45-1 108-77-0 122-80-5 4051-63-2 28632-30-6
 98809-01-9
 (reaction of, with amines)

L62 ANSWER 43 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:34633 HCAPLUS

DOCUMENT NUMBER: 106:34633

TITLE: Printing ink pigment
 dispersants

INVENTOR(S): Katsura, Hiromitsu; Ehashi, Shigeyuki;
 Kashioka, Motohiko; Sakamoto, Makoto

PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan

SOURCE: Ger. Offen., 45 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

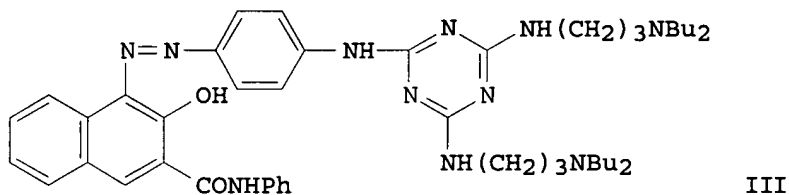
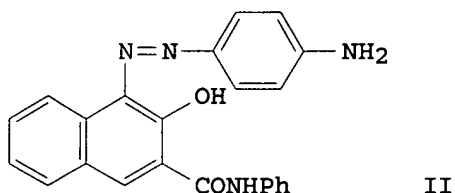
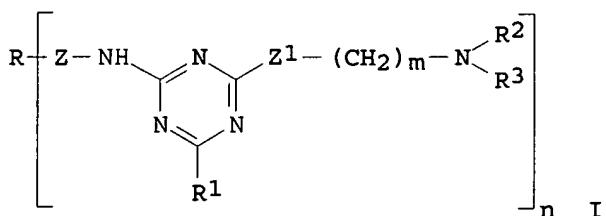
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
DE 3514077	A1	19861023	DE 1985-3514077	1985 0418
DE 3514077	C2	19920430	DE 1985-3514077	1985 0418
PRIORITY APPLN. INFO.:				

GI

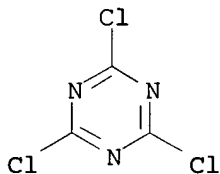


AB Pigment dispersants I [$m = 1-6$; $n = 1-4$; R = organic dye or pigment residue; $\text{R}^1 = \text{Z}^1(\text{CH}_2)_m\text{NR}^2\text{R}^3$, OH, alkoxy; $\text{R}^2, \text{R}^3 =$ (un)substituted alkyl, heterocyclic residue; Z = direct bond, CH_2 , $\text{CONHC}_6\text{H}_3\text{R}^4$, $\text{SO}_2\text{NHC}_6\text{H}_3\text{R}^4$, or $\text{CH}_2\text{NHCOC}_6\text{H}_3\text{NHC}_6\text{H}_3\text{R}^4$; $\text{R}^4 = \text{H}$, alkyl, alkoxy, halogen; $\text{Z}^1 = \text{NH}$, O] are useful in offset or gravure ink compns. Thus, II was condensed with cyanuric chloride and the intermediate condensed with 3-(N,N-dibutylamino)propylamine to give III.

IT 108-77-0, Cyanuric chloride
(condensation of, with (aminophenylazo)
hydroxynaphthanilide)

RN 108-77-0 HCAPLUS

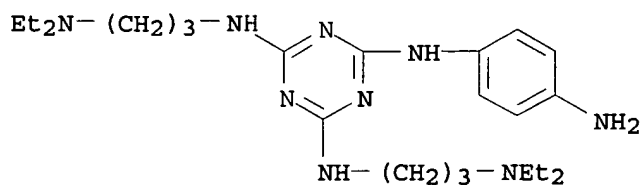
CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)



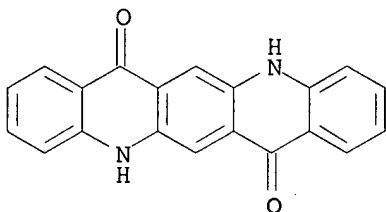
IT 81980-94-1
(coupling of diazotized, with acetoacetylaminobenzimidazol
one)

RN 81980-94-1 HCAPLUS

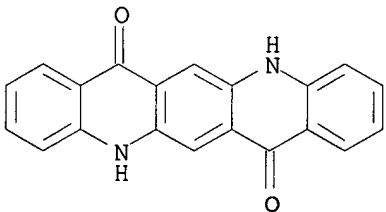
CN 1,3,5-Triazine-2,4,6-triamine, N-(4-aminophenyl)-N',N''-bis[3-(diethylamino)propyl]- (9CI) (CA INDEX NAME)



IT 1047-16-1, C.I. Pigment Violet 19
 (dispersants for, C.I. Pigment Violet 19, in **printing**
ink compns., preparation of)
 RN 1047-16-1 HCAPLUS
 CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
 (CA INDEX NAME)

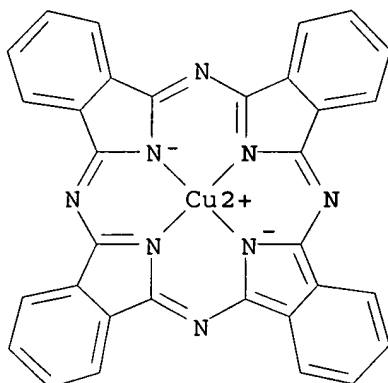


IT 1047-16-1DP, **aminomethylated**, reaction products
 with cyanuric chloride and **dibutylaminoethylamine**
 98772-91-9P 98809-05-3P 98809-06-4P
 98809-07-5P 98809-08-6P 98809-09-7P
 98809-10-0P 98809-11-1P
 (manufacture of, as dispersants for **printing ink**
 pigments)
 RN 1047-16-1 HCAPLUS
 CN Quino[2,3-b]acridine-7,14-dione, 5,12-dihydro- (6CI, 8CI, 9CI)
 (CA INDEX NAME)

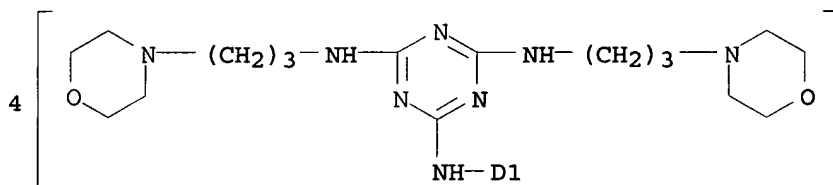


RN 98772-91-9 HCAPLUS
 CN Copper, [N,N',N'',N'''-tetrakis[4,6-bis[[3-(4-morpholinyl)propyl]amino]-1,3,5-triazin-2-yl]-29H,31H-phthalocyanine-C,C,C,C-tetraminato(2-)-κN29,κN30,κN31,κN32]- (9CI) (CA INDEX NAME)

PAGE 1-A

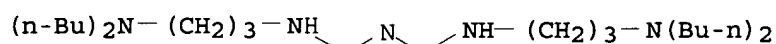


PAGE 2-A



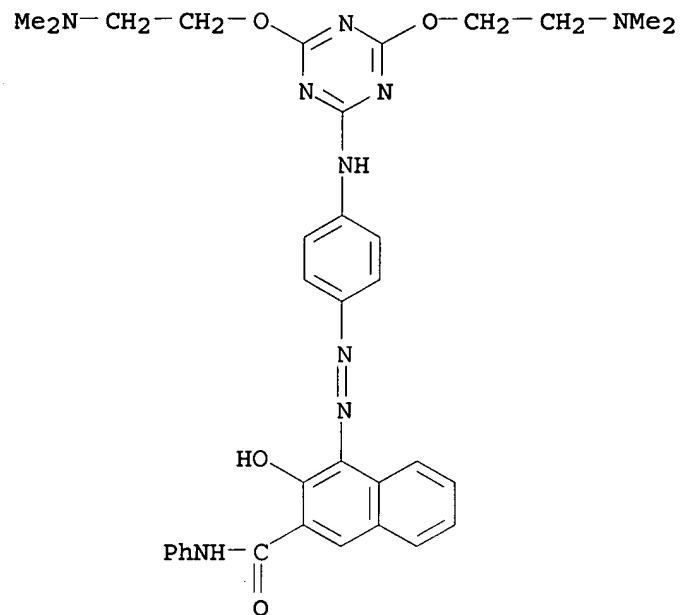
RN 98809-05-3 HCAPLUS

CN 2-Naphthalenecarboxamide, 4-[[4-[[4,6-bis[[3-(dibutylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]azo]-3-hydroxy-N-phenyl- (9CI) (CA INDEX NAME)



RN 98809-06-4 HCAPLUS

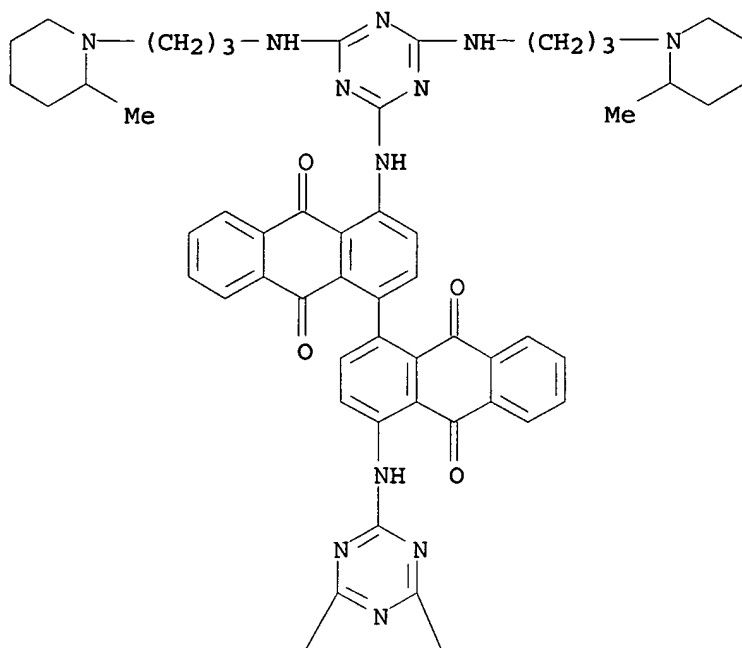
CN 2-Naphthalenecarboxamide, 4-[[4-[[4,6-bis[2-(dimethylamino)ethoxy]-1,3,5-triazin-2-yl]amino]phenyl]azo]-3-hydroxy-N-phenyl- (9CI)
(CA INDEX NAME)



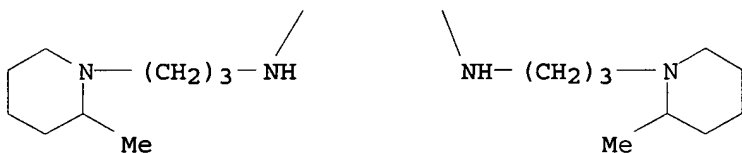
RN 98809-07-5 HCAPLUS

CN [1,1'-Bianthracene]-9,9',10,10'-tetrone, 4,4'-bis[[4,6-bis[[3-(2-methyl-1-piperidinyl)propyl]amino]-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

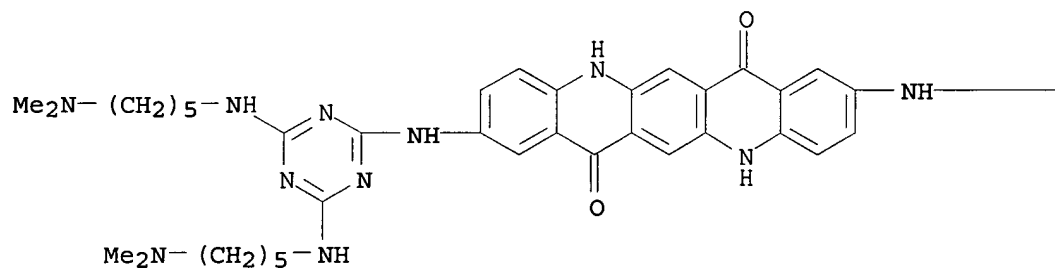


PAGE 2-A

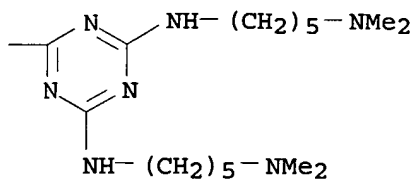


RN 98809-08-6 HCAPLUS
 CN Quino[2,3-b]acridine-7,14-dione, 2,9-bis[[4,6-bis[[5-(dimethylamino)pentyl]amino]-1,3,5-triazin-2-yl]amino]-5,12-dihydro- (9CI) (CA INDEX NAME)

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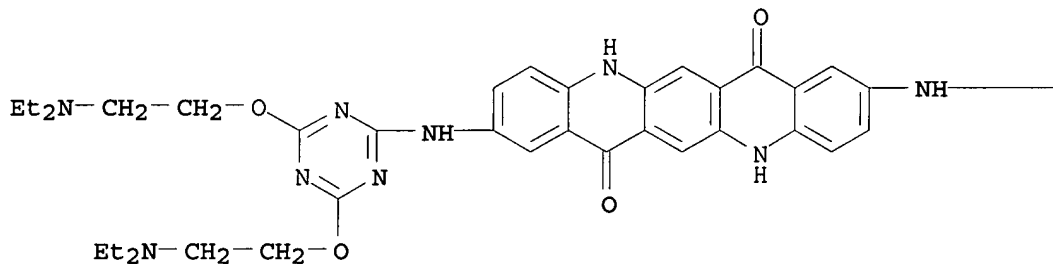
PAGE 1-B



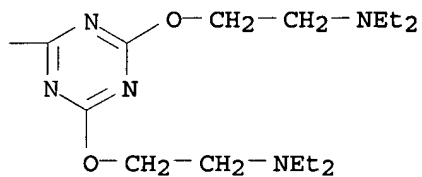
RN 98809-09-7 HCAPLUS

CN Quino[2,3-b]acridine-7,14-dione, 2,9-bis[[4,6-bis[2-(diethylamino)ethoxy]-1,3,5-triazin-2-yl]amino]-5,12-dihydro-(9CI) (CA INDEX NAME)

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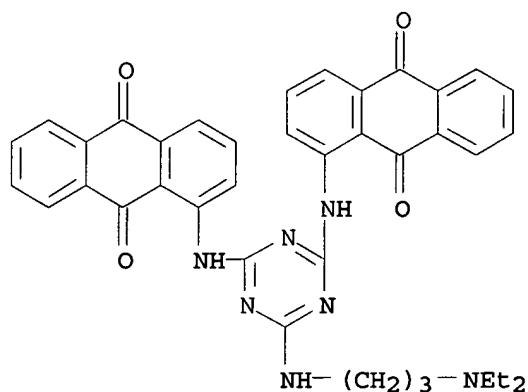


PAGE 1-B



RN 98809-10-0 HCAPLUS

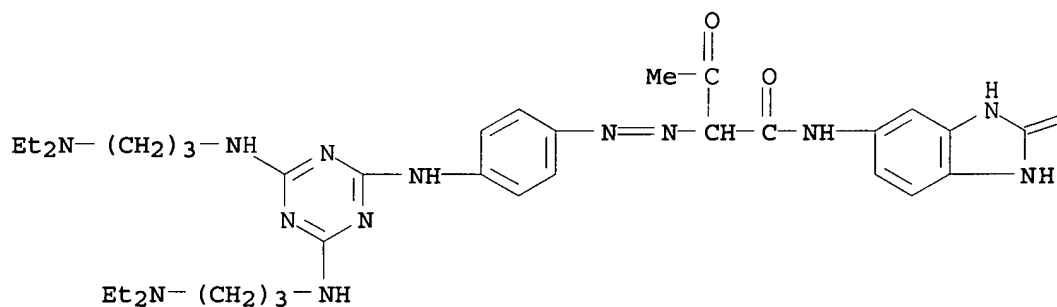
CN 9,10-Anthracenedione, 1,1'-[[6-[[3-(diethylamino)propyl]amino]-1,3,5-triazine-2,4-diyl]diimino]bis- (9CI) (CA INDEX NAME)



RN 98809-11-1 HCAPLUS

CN Butanamide, 2-[[4-[[4,6-bis[[3-(diethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]azo]-N-(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)-3-oxo- (9CI) (CA INDEX NAME)

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=O

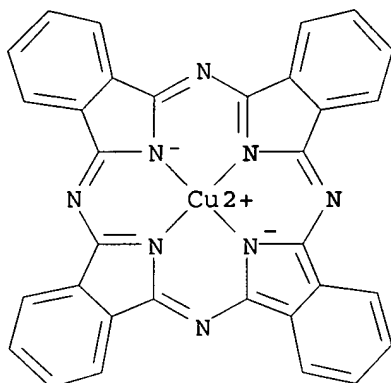
IT 98772-90-8P

(preparation and condensation of, with (aminopropyl)morpholine)

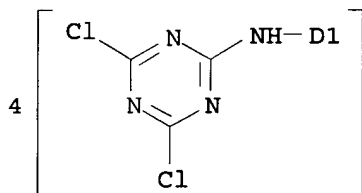
RN 98772-90-8 HCAPLUS

CN Copper, [N,N',N'',N'''-tetrakis(4,6-dichloro-1,3,5-triazin-2-yl)-29H,31H-phthalocyanine-C,C,C,C-tetraminato(2-)-N29,N30,N31,N32]- (9CI) (CA INDEX NAME)

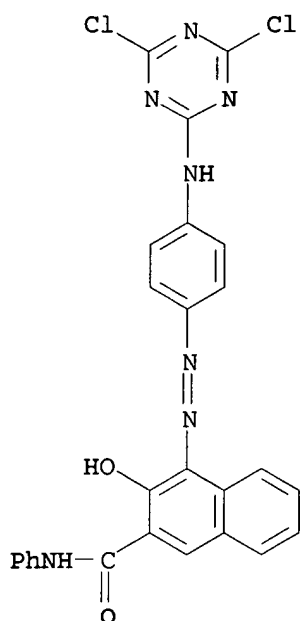
PAGE 1-A



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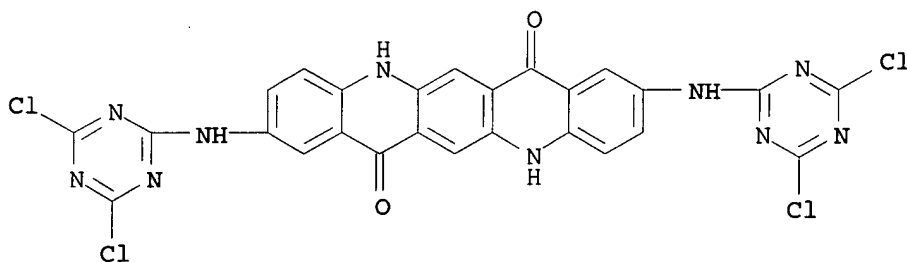
IT 98809-02-0P
 (preparation and condensation of, with (dibutylamino
)propylamine)
 RN 98809-02-0 HCAPLUS
 CN 2-Naphthalenecarboxamide, 4-[[4-[(4,6-dichloro-1,3,5-triazin-2-
 yl)amino]phenyl]azo]-3-hydroxy-N-phenyl- (9CI) (CA INDEX NAME)



IT 98809-04-2P

(preparation and condensation of, with (dimethylamino)
)pentylamine)

RN 98809-04-2 HCAPLUS

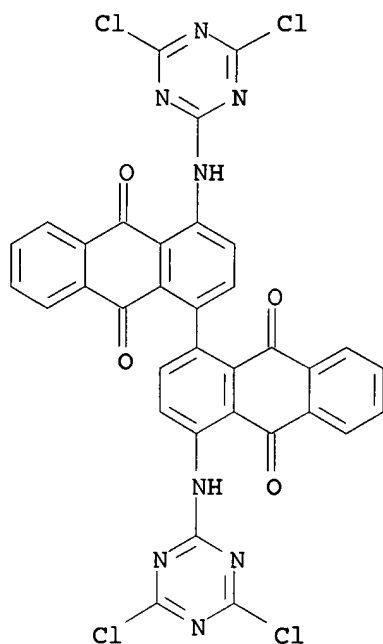
CN Quino[2,3-b]acridine-7,14-dione, 2,9-bis[(4,6-dichloro-1,3,5-
triazin-2-yl)amino]-5,12-dihydro- (9CI) (CA INDEX NAME)

IT 98809-03-1

(reaction of, with (aminopropyl)pipecoline)

RN 98809-03-1 HCAPLUS

CN [1,1'-Bianthracyclic]-9,9',10,10'-tetrone, 4,4'-bis[(4,6-dichloro-
1,3,5-triazin-2-yl)amino]- (9CI) (CA INDEX NAME)



- IC ICM C09B067-46
ICS C09B067-20; C09D011-02; B01F017-16; B01F017-22; B01F017-26
- CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 42
- ST offset **printing ink** pigment dispersant;
gravure **printing ink** pigment dispersant
- IT Dispersing agents
(**amino**-substituted triazines, for **printing ink** pigments, manufacture of)
- IT Pigments
(dispersants for, in **printing inks**, triazine compds. as, preparation of)
- IT **Inks**
(**printing**, dispersants for pigments in, **amino**-substituted triazines as, manufacture of)
- IT 108-77-0, Cyanuric chloride
(condensation of, with (**aminophenylazo**)hydroxynaphthanilide)
- IT 100-37-8 102-83-0, N,N-Dibutylaminopropylamine
104-78-9 108-01-0, N,N-(Dimethylamino)ethanol
3209-46-9 25560-00-3
(condensation of, with chlorotriazines)
- IT 82-45-1, 1-Aminoanthraquinone 122-80-5, p-Aminoacetanilide 4051-63-2 18847-00-2 28632-30-6 98809-01-9
(condensation of, with cyanuric chloride)
- IT 81980-94-1
(coupling of diazotized, with acetoacetylaminobenzimidazolone)
- IT 26576-46-5, 5-Acetoacetylaminobenzimidazolone
(coupling of, with diazotized anilines)
- IT 147-14-8, C.I. Pigment Blue 15
(dispersants for, C.I. Pigment Blue 15, in **printing**)

ink compns., preparation of)

IT 12236-62-3, C.I. Pigment Orange 36
(dispersants for, C.I. Pigment Orange 36, in printing ink compns., preparation of)

IT 24108-89-2, C.I. Pigment Red 123
(dispersants for, C.I. Pigment Red 123, in printing ink compns., preparation of)

IT 4378-61-4, C.I. Pigment Red 168
(dispersants for, C.I. Pigment Red 168, in printing ink compns., preparation of)

IT 6655-84-1, C.I. Pigment Red 17
(dispersants for, C.I. Pigment Red 17, in printing ink compns., preparation of)

IT 4051-63-2, C.I. Pigment Red 177
(dispersants for, C.I. Pigment Red 177, in printing ink compns., preparation of)

IT 5521-31-3, C.I. Pigment Red 179
(dispersants for, C.I. Pigment Red 179, in printing ink compns., preparation of)

IT 3564-21-4, C.I. Pigment Red 48
(dispersants for, C.I. Pigment Red 48, in printing ink compns., preparation of)

IT 2092-56-0, C.I. Pigment Red 53
(dispersants for, C.I. Pigment Red 53, in printing ink compns., preparation of)

IT 1047-16-1, C.I. Pigment Violet 19
(dispersants for, C.I. Pigment Violet 19, in printing ink compns., preparation of)

IT 13463-67-7P, C.I. Pigment White 6, preparation
(dispersants for, C.I. Pigment White 6, in printing ink compns., preparation of)

IT 592-05-2
(dispersants for, C.I. Pigment Yellow 48, in printing ink compns., preparation of)

IT 5567-15-7, C.I. Pigment Yellow 83
(dispersants for, C.I. Pigment Yellow 83, in printing ink compns., preparation of)

IT 5280-80-8, C.I. Pigment Yellow 95
(dispersants for, C.I. Pigment Yellow 95, in printing ink compns., preparation of)

IT 1344-37-2
(dispersants for, in printing ink compns., preparation of)

IT 147-14-8DP, Copper phthalocyanine, chlorosulfonated, reaction products with (aminophenylamino)bis[(diethylamino)propylamino]triazine
1047-16-1DP, aminomethylated, reaction products with cyanuric chloride and dibutylaminoethylamine
98772-91-9P 98809-05-3P 98809-06-4P
98809-07-5P 98809-08-6P 98809-09-7P
98809-10-0P 98809-11-1P
(manufacture of, as dispersants for printing ink pigments)

IT 98772-90-8P
(preparation and condensation of, with (aminopropyl)morpholine)

IT 98809-02-0P
(preparation and condensation of, with (dibutylamino)propylamine)

IT 98809-04-2P

(preparation and condensation of, with (dimethylamino)
)pentylamine)
 IT 98809-03-1
 (reaction of, with (aminopropyl)pipecoline)

L62 ANSWER 44 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1985:229502 HCAPLUS
 DOCUMENT NUMBER: 102:229502
 TITLE: Water developable positive acting lithographic
 printing plate
 INVENTOR(S): Rousseau, Alan D.; Fohrenkamm, Elsie A.;
 Kausch, William L.
 PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA
 SOURCE: U.S., 12 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 4507382	A	19850326	US 1983-471808	1983 0303

PRIORITY APPLN. INFO.: US 1983-471808

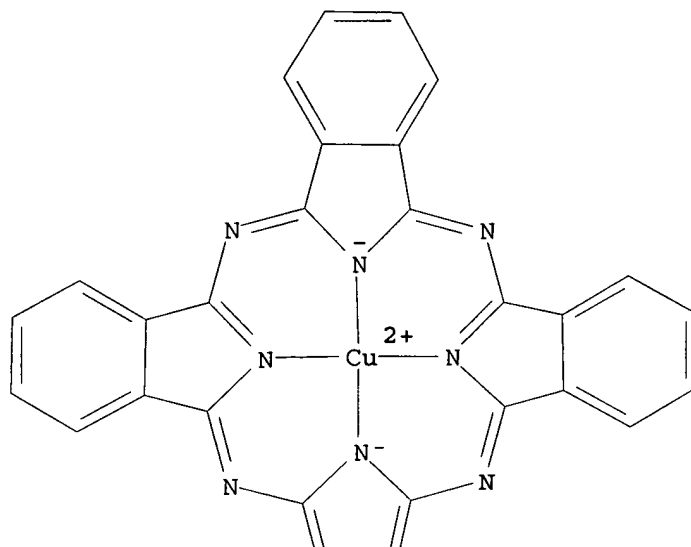
1983
0303

AB A durable water-developable pos. lithog. plate is prepared by coating a metallic or polymeric support with an oleophilic composition, drying, curing, overcoating with a water-soluble photopolymer composition containing an ethylenically unsatd. dextrin oligomer, exposing, and then developing with water to provide **hydrophilic** background areas and oleophilic image areas. Thus, a poly(vinylidene chloride)-primed polyester support was coated with a composition containing a urethane oligomer (prepared by reacting Lexorez 5171-280 with 2-isocyanatoethyl methacrylate in the presence of di-Bu dilaurate and Irganox 1010 antioxidant) 109.6, Michler's ketone 4, diphenyliodonium hexafluorophosphate 4, amorphous silica (Imsil A-10) 100, MeCOEt 122, PrOH 107.7, and H₂O 42.3 g, dried, irradiated 40 s at 20.3 cm from a 5 kW Hg lamp, overcoated with an aqueous composition containing H₂O 10, 1,3-diacrylamido-2-hydroxypropane 1.3, 31% aqueous 2,3-dihydroxy-1-acrylamidopropane 2.1, a 50% aqueous dispersion Colanyl Red pigment 0.67, Syloid 244 1.95, diphenyliodonium hexafluorophosphate 0.1, 4,4'-bis(N-2-carboxyethyl-N-methylamino)benzophenone di-Na salt (2% aqueous) 7.7, acrylamidoethyl dextrin (prepared by reacting dextrin with N-methylolacrylamide in aqueous solution containing acrylic acid and phenothiazine) 3 g, dried, imagewise exposed for 5 s, developed with water, and run on a **printing** press to give 12,000 copies with a coarse ink.

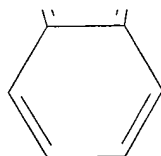
IT 147-14-8 79771-30-5
 (lithog. pos. **printing** plate with oleophilic layer
 containing, water-developable)

RN 147-14-8 HCAPLUS
 CN Copper, [29H,31H-phthalocyaninato(2-)-
 κN29,κN30,κN31,κN32]-, (SP-4-1)-(9CI)
 (CA INDEX NAME)

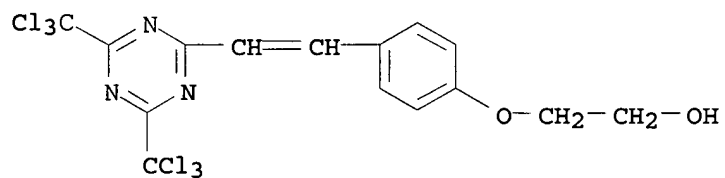
PAGE 1-A



PAGE 2-A



RN 79771-30-5 HCAPLUS
 CN Ethanol, 2-[4-[2-[4,6-bis(trichloromethyl)-1,3,5-triazin-2-yl]ethenyl]phenoxy]-(9CI) (CA INDEX NAME)



IC ICM G03F007-10
 INCL 430275000
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST lithog **printing** plate water development;
 hydrophilic photopolymer **hydrophobic** background

- lithog
- IT Silica gel, uses and miscellaneous
(lithog. pos. **printing** plate with photosensitive layer containing, water-developable)
-
- IT Urethane polymers, uses and miscellaneous
(oligomeric, pos. water-developable lithog. **printing** plate with photosensitive layer containing)
- IT 79-10-7, uses and miscellaneous
(dextrin reaction with methylacrylamide in presence of, for photopolymer composition for lithog. **printing** plate preparation)
- IT 90-94-8 121-44-8, uses and miscellaneous **147-14-8**
2530-85-0 4986-89-4 7631-86-9, uses and miscellaneous
14808-60-7, uses and miscellaneous 24599-21-1 30674-80-7D,
reaction products with polyester polyols 58109-40-3
79771-30-5 85213-14-5D, reaction products with
isocyanatoethyl methacrylate
(lithog. pos. **printing** plate with oleophilic layer containing, water-developable)
- IT 924-42-5D, reaction products with dextrin 42521-68-6
90698-35-4 91576-33-9 96511-23-8D, reaction products with
methylolacrylamide 96603-26-8
(lithog. pos. **printing** plate with photosensitive layer containing, water-developable)